BEFORE THE DEPARTMENT OF NATURAL RESOURCES
STATE OF NEBRASKA

IN THE MATTER OF THE PROPOSED RULES)
REGARDING THE DETERMINATION OF)
FULLY APPROPRIATED RIVER BASINS)
PURSUANT TO NEB. REV. STAT. 46-713)
TO BE INCLUDED IN TITLE 457 OF THE)
NEBRASKA ADMINISTRATIVE CODE)

Holiday Inn Convention Center
South 2nd Avenue
Kearney, NE 68847

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Convened, pursuant to notice at 9:00 a.m. on August 11, 2005,

BEFORE:

ANN DIERS, Hearing Officer.

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OTHERS PRESENT:

Roger Patterson, Director; Ann Bleed, Deputy Director; Tina Kurtz, Integrated Management Planning Coordinator.

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I N D E X

COMMENTS BY:

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EXHIBITS:		Marked	Offered	Ruled On	Found
4	Letter to The Honorable John Gale Including Working Draft of Proposed Rule (3 pages)	1	3	4	Vol. II
5	Letter to Senator Patrick Engel Including Working Draft of Proposed Rule (3 pages)	1	4	4	Vol. II
6	Draft Report and Draft Proposed Rule dated June 10, 2005. (12 pages)	1	18	18	Vol. II
6-1	Rulemaking Member List (1 page)	1	18	18	Vol. II
6-2	Rulemaking Charge dated December 8, 2004. (1 page)	1	18	18	Vol. II
6-3	Rulemaking Timeline dated December 8, 2004. (1 page)	1	18	18	Vol. II
6-4	Rule 84-927 on Negotiated Rulemaking Committees (5 pages)	1	18	18	Vol. II
6-5	Rulemaking Technical Data Correspondence dated January 7, 2005. (2 pages)	1	18	18	Vol. II

EXHIBITS:	Marked	Offered	Ruled On	Found
6-22 Considerations For Considering Fully Appropriated Areas (1 page)	1	18	18	Vol. II
6-23 Basic Assumptions Used in the Development of Proposed Method (3 pages)	1	18	18	Vol. II
6-24 Proposed Method to Determine Lag Effect (1 page)	1	18	18	Vol. II
6-25 Flow Administration Analysis-Loup and Big Blue River Basins (2 pages)	1	18	18	Vol. II
6-26 Amount of Irrigation Water Required for Sustainable Irrigation (1 page)	1	18	18	Vol. II
6-27 NRM Ideas Correspondence from Dan Smith to Roger Patterson dated February 8, 2005 (2 pages)	1	18	18	Vol. II
6-28 De minimis Examples Correspondence from Brian Barels dated March 4, 2005 (3 pages)	1	18	18	Vol. II
6-29 Chart, Exhibit 29 (1 page)	1	18	18	Vol. II

EXHIBITS:	Marked	Offered	Ruled On	Found
6-30 Information Sheet, Exhibit 30 (1 page)	1	18	18	Vol. II
6-31 Memorandum from Don Blankenau dated March 14, 2005 (1 page)	1	18	18	Vol. II
6-32 Negotiated Rule-making Proposal dated March 17, 2005 (1 page)	1	18	18	Vol. II
6-33 History of Drought in Nebraska Article (4 pages)	1	18	18	Vol. II
6-34 Correspondence from Pathfinder Irrigation District dated April 29, 2005 (1 page)	1	18	18	Vol. II
6-35 Correspondence from Central dated May 2, 2005 (1 page)	1	18	18	Vol. II
6-36 Correspondence from Middle Loup Public Power and Irrigation District dated May 2, 2005. (1 page)	1	18	18	Vol. II
6-37 Correspondence from Upper Big Blue NRD dated May 2, 2005 (4 pages)	1	18	18	Vol. II

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6-46	Correspondence from Middle Republican NRD dated May 3, 2005 (2 pages)	1	18	18	Vol. II
6-47	Email from Jay Rempel to Ann Diers dated May 3, 2005 (4 pages)	1	18	18	Vol. II
6-48	Email from Chad Smith to Ann Diers dated May 3, 2005 (4 pages)	1	18	18	Vol. II
7	Explanation File by Ray Supalla (5 pages)	1	18	18	Vol. II
8	Determination of Consumptive Irrigation Requirement (1 page)	1	18	18	Vol. II
9	Email from Ron Bishop to Ann Diers dated June 20, 2005 (2 pages)	1	18	18	Vol. II
10	Correspondence from Clint Johannes dated June 27, 2005 (3 pages)	1	18	18	Vol. II
11	Correspondence from Gary Hedman dated May 17, 2005 (2 pages)	1	18	18	Vol. II

EXHIBITS:		Marked	Offered	Rule On	Found
12	PowerPoint Presentation by Dr. Supalla (10 pages)	1	18	18	Vol. II
13	Justification for Minimal Irrigation Requirement Definition (5 pages)	1	18	18	Vol. II
14	Evaluation of Simplified Stream-Aquifer Depletion Models for Water Rights Administration (10 pages)	1	18	18	Vol. II
15	Annual Stream Depletion Annual Amount Pumped is 100 AF (1 page)	1	18	18	Vol. II
16	Correspondence from Ronald Klein dated August 6, 2005 (2 pages)	1	18	18	Vol. II
17	Written Comments from Brian Barels dated August 10, 2005 (5 pages)	1	18	18	Vol. II
18	Written Comments from Dennis Strauch dated August 10, 2005 (4 pages)	1	18	18	Vol. II
19	Written Comments from Larry Hutchinson dated August 10, 2005 (2 pages)	1	18	18	Vol. II

EXHIBITS:		Marked	Offered	Ruled On	Found
20	Correspondence from Richard Luckey to Ann Bleed Received August 11, 2005 (2 pages)	1	18	18	Vol. II
21	Written Testimony of Ann Bleed (6 pages)	1	18	18	Vol. II
22	Written Testimony of Dale Wiles (2 pages)	19	22	22	Vol. II
23	Written Testimony of Mike Allen (2 pages)	25	25	25	Vol. II
24	Written Testimony of Eric Alm (1 page)	29	29	29	Vol. II
25	Written Testimony of Don Adams (2 pages)	35	35	35	Vol. II
26	Written Testimony of Duane Filsinger (2 pages)	40	40	40	Vol. II
27	Written Testimony of Clint Johannes (1 page)	43	43	43	Vol. II
28	Written Testimony from Nebraska Corn Growers Association (1 page)	44	44	44	Vol. II
29	Written Testimony of Dave Nelson (3 pages)	44	49	49	Vol. II

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30	Written Testimony from the Lower Elkhorn NRD (3 pages)	53	58	58	Vol. II
31	Written Testimony of Ray Winz (2 pages)	61	60	61	Vol. II
32	Written Testimony of Don Kraus (4 pages)	61	63	63	Vol. II
33	Written Testimony of Don Batie (2 pages)	63	64	67	Vol. II
34	Written Testimony of Roger Houdersheldt (3 pages)	67	67	73	Vol. II
35	Written Testimony of James Paulsen (2 pages)	75	75	75	Vol. II
36	Written Testimony of Chad Smith (2 pages)	79	79	79	Vol. II
37	Written Testimony of Mike Onnen (1 page)	79	81	81	Vol. II
38	Written Testimony of John Thorburn (1 page)	81	83	83	Vol. II
39	Affidavit of Stephen J. Brooks (5 pages)	85	92	93	Vol. II
40	Written Testimony of Don Blankenau (3 pages)	85	92	93	Vol. II

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41	Written Testimony of Ron Bishop (3 pages)	93	99	99	Vol. II
42	Written Testimony of Curt Freisen (1 page)	105	105	105	Vol. II
43	Written Testimony of Duane Hovorka (2 pages)	105	105	105	Vol. II
44	Written Testimony from Steve Huggenberger (4 pages)	105	105	105	Vol. II
45	Written Testimony from Eugene T. Glock (1 page)	105	105	105	Vol. II
46	Additional Written Testimony from Michael D. Onnen (1 page)	105	105	105	Vol. II
47	Written Testimony from Robert O'Dell (2 pages)	105	105	105	Vol. II
48	Written Testimony from Pete Letheby (2 pages)	105	105	105	Vol. II
49	Additional Written Testimony from Richard Luckey (2 pages)	105	105	105	Vol. II
50	Additional Written Testimony from Erik Alm (3 pages)	105	105	105	Vol. II

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REPORTER'S CERTIFICATE:

STATE OF NEBRASKA)
) ss:
LANCASTER COUNTY)

I, KELLY S. HORSLEY, certified reporter for ACE Reporting, NE, certify that I reported the proceedings in this matter; that the transcript of testimony is a true, accurate and complete extension of the recording made of those proceedings; and further, that the disposition of the exhibits is referenced in the index hereto.

IN TESTIMONY WHEREOF, I have hereunto set my hand at Lincoln, Nebraska, this _____ day of August, 2005.

_____
Kelly S. Horsley, CERT-ER

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PROCEEDINGS:

(Marked Exhibits 1-9 for identification.)

THE HEARING OFFICER: We'll go on the record now. Good morning. My name is Ann Diers. I'm legal counsel for the Nebraska Department of Natural Resources, and I will be the hearing officer at this morning's hearing. With me today are Roger Patterson, the director of the Department of Natural Resources; Ann Bleed, Deputy Director of the Department of Natural Resources, and Tina Kurtz, Integrated Management Planning Coordinator. Kelly Horsley is the court reporter who will be making a verbatim record of this hearing.

This is a public hearing, and not an evidentiary hearing. Those testifying will not be required to be sworn in. If you haven't signed the sign in sheet recording your presence at the hearing, I would request that you do so. Those sheets, I believe, are in the back of the room. We have a separate sign-in sheet identifying those persons wishing to testify. You may testify even if you have not previously signed the testimony sign-in sheet. Also, as noted in the notice of this hearing, testimony may either be oral or written. Written testimony will also be accepted at this hearing, and should be submitted to the court reporter.

The purpose of this hearing is to take

testimony and evidence about amendment of Title 457 entitled, "Rules for Surface Water," to include a new Chapter 24 regarding, "Rules Regarding the Determination of Fully Appropriated River Basins," pursuant to Nebraska Revised Statute, Section 46-713, which required the Department of Natural Resources to adopt and promulgate rules and regulations specifying the types of scientific data and other information that will be considered for making the preliminary determination as to whether a river basin, sub-basin or reach presently is fully appropriated without the initiation of additional uses. These rules also establish, pursuant to Nebraska Revised Statute, Section 46-748, the criteria the Department will use for making the determination of fully appropriated, and the determination of the geographic area within which surface water and ground water are hydrologically connected.

The Department established the Negotiated Rulemaking Committee relating to these proposed rules pursuant to petition. The Committee reached a consensus on the required proposed rule relating to the types of scientific data, and other information that will be considered for making the preliminary determination as to whether a river basin, sub-basin, or reach presently is fully appropriated without the initiation of additional

uses. The committee did not reach a consensus on the proposed rule pertaining to the criteria the Department will use for making the determination of fully appropriated, and the determination of the geographic area within which surface water and ground water are hydrologically connected.

I would like to submit into the record, a copy of the proposed rule, to be codified as Title 457 of the Nebraska Administrative Code, Chapter 24, titled, "Determination of Fully Appropriated Basins, Sub-Basins or Reaches." This is marked as Exhibit 1.

I would also like to submit the Proof of Publication pursuant to Nebraska Revised Statute, Section 84-907, stating that the publication of the Department of Natural Resources public hearing notice occurred on July 11th, 2005, in the Omaha World-Herald. This is marked as Exhibit 2.

Further, I offer the Department's submission of the Rules and Regulations Policy Pre-Review Checklist to the Governor's Policy Research Office, which submission was hand-delivered on June 23rd, 2005, together with the Policy Research Office Approval to Proceed, dated June 28th. This exhibit is marked as Exhibit 3.

I also offer into the record, a copy of the Department's letter of July 8th, 2005, addressed to the

Honorable John Gale, Nebraska Secretary of State, which was forwarded along with one copy of a working draft of the proposed rule. This letter was hand-delivered to the Secretary of State's Office on July 8th, 2005, and is marked as Exhibit 4.

I also offer a copy of the Department's letter of July 8th, 2005, addressed to Senator Patrick Engel, Chairman of the Executive Board of the Legislative Counsel, which was forwarded along with one copy of a working draft of the proposed rule. This letter was hand-delivered to Senator Engel's office on July 8th, 2005, and is marked as Exhibit 5.

Exhibits 1 through 5 will be received into the record for this hearing.

At this time, I would ask Deputy Director Bleed to proceed for the Department of Natural Resources.

MS. BLEED: Thank you. My name is Ann Bleed. I'm Deputy Director of the Department of Natural Resources. The purpose of the Committee was to develop a report and/or proposed rule relating to the types of scientific data and other information that will be considered for making the preliminary determinations required to prepare a report pursuant to Nebraska Revised Statute 46-713(d). The Committee was also charged with developing the criteria that will be used for making the

required preliminary determinations of whether a river basin, sub-basin or reach is fully appropriated without the initiation of additional uses, and the geographic area within which the Department considers surface water and ground water to be hydrologically connected for the purposes of any such determination, pursuant to the evaluations and reports that the Department must complete by January 1 of each year, beginning in 2006, required by Section 46-713 of the Nebraska Revised Statutes.

The Committee met a total of seven times. Following its initial meeting in December, subsequent meetings of the Committee reviewed information relating to levels of interference and degrees of hydrologic connectivity, and considered whether such information could be utilized to arrive at the formulation of a possible rule. Dr. Raymond J. Supalla, an agricultural economist and professor, and assistant dean in the College of Technical Agriculture, provided to the Committee a method for doing an economic analysis of the amount of water that would be needed for the irrigation of crops in order to make their investment in irrigation economically beneficial. Jeff Shafer and James Cannia, both from the Department, provided examples of an analysis that could be used to determine the amount of flow expected to be available without further development

in a river basin. Shafer and Cannia also provided maps for comparison purposes showing various degrees of connectivity of ground water to streams in certain river basins in the state.

During the last few meetings of the Committee, the group considered at length various draft rules proposed by groups of Committee members and the Departments. These meetings included considerable discussion of the various proposals regarding the types of scientific data and other information that will be considered for making the preliminary determination pursuant to Nebraska Revised Statutes 46-713(d), and the criteria that will be used for making preliminary determinations of whether a river basin, sub-basin or reach is fully appropriated without the initiation of additional uses; and the geographic area within which the Department considers surface water and ground water to be hydrologically connected for the purposes of any such determination.

A draft report was circulated to the Committee prior to finalization. Committee members were also provided an opportunity to include additional information, recommendations, or additional materials as an addendum to the report.

The Department received comments from 13 of the

17 members of the negotiated Rulemaking Committee. The director reviewed the comments, and made revisions to the draft report based on some of the comments received. The Exhibits to the draft report include copies of the written comments received from the members of the Negotiated Rulemaking Committee, as well as copies of the materials considered by the Negotiated Rulemaking Committee during its meetings. I offer the draft report marked as Exhibit 6, which includes Exhibits to the report, into the record.

Based on the discussions of the Negotiated Rules committee, the comments on the report, and further discussions with Dr. Raymond Supalla and Dr. Derrel Martin, and agricultural engineer in the Department of Biological Systems Engineering at the University of Nebraska, the Director made further revisions to the proposed rules.

No one on the Committee expressed disagreement on Section 002 of the proposed rule that states that the types of scientific data and other information to be considered for making preliminary determinations shall include surface water administrative records, Department hydrographic reports, Department and USGS stream gage records, Department registered well database, water level records and maps from the Natural Resources District, the

Department, the University of Nebraska, United States Geologic Survey and other publications subject to peer review; technical hydro-geological reports from the University of Nebraska, the USGS, or other publications subject to peer review; ground water models, current rules and regulations of the Natural Resources Districts, and best scientific information and tools available to the Department to identify impacts of hydrologically connected uses to the basin, sub-basin or reach being considered.

There was not a unanimous consensus on the second part of the rule: the criteria that will be used for making the required preliminary determinations of whether a river basin, sub-basin or reach is fully appropriated without the initiation of additional uses, and the geographic area within which the Department considers surface water and ground water to be hydrologically connected for purposes of any such determination, for the evaluations and reports the Department must complete by January 1 of each year, beginning in 2006.

Whether a river basin, sub-basin or reach is fully appropriated without the initiation of additional uses. As stated, the proposed rule states, "For purposes of Section 46-713(3)(a), the surface water supply for a

river basin, sub-basin or reach shall be deemed insufficient if after considering the impact of the lag effect from the existing ground water pumping in the hydrologically connected areas that will deplete the water supply within the next 25 years, it is projected that during the period of May 1 through September 30, inclusive, any irrigation right will be unable to divert sufficient surface water to meet, on average, 85 percent of the annual crop irrigation requirement; or during the period of July 1 through August 31, inclusive, will be unable to divert sufficient surface water to meet at lest 65 percent of the annual crop irrigation requirement. For the purposes of this rule, the quote, 'annual crop irrigation requirement,' unquote, will be determined by the annual irrigation requirement for corn. This requirement is based on the average evapotranspiration of corn that is fully watered to achieve the maximum yield and average amount of precipitation that is effective in meeting the crop water requirements for the area."

These crop irrigation criteria were based on Supalla's economic analysis of how much irrigation water would be needed to justify investment in an irrigation system for a 130 acre field. I offer Supalla's economic analysis spreadsheet marked as Exhibit 7 into the record. This criteria was chosen because most junior water rights

in the state offer irrigation, and the predominant crop grown is corn. The crop irrigation requirement for corn, which varies greatly across the state, will be determined by Derrel Martin, and will be available on the Department's web site. I offer Martin's economic analysis spreadsheet marked as Exhibit 8, into the record, on his evaluation for the corn -- or his methodology for evaluating corn. In the event that the junior water rights are not irrigation rights, the Department will utilize the standard of interference appropriate for the use, taking into account the purpose for which the appropriation was granted.

Several Committee members argued that the criterion should not be based on economic analysis of current day conditions, but should consider whether the water right being considered was able to divert the amount of water expected to be available at the time the permit was granted. The Department determined that the economic analysis based on current day conditions could result in more reliable data than speculating on previous expectations, and was more appropriate for making the determination of which basins were currently fully appropriated.

In determining whether a river basin, sub-basin or reach is fully appropriated without the initiation of

additional uses, the Department will first determine the percentage of time over the previous twenty years that surface water appropriators located within the basin, sub-basin or reach were able to divert. The determination will be based on the water administration records of the Department that delineate which water rights were shut off because of insufficient stream flow. In so doing, it will be assumed that if a surface water diverter was not shut off, they would be able to divert at their permitted rate. The most recent twenty-year period was chosen to reflect the most recent development in the basin and a sufficient number of years to include both wet and dry weather patterns.

The depletions to stream flow from the future lag effect of existing ground water wells over the next 25 years will be determined, and the above determination of the ability to divert will be adjusted accordingly. The determination of the lag effects from existing wells will be based on ground water models using MODFLOW or other suitable model codes where such models exist, and in the absence of a suitable ground water model, the Jenkins method. The Committee did not agree on the length of time period that should be used when calculating the lag impact of ground water pumping on stream flow. Periods ranging from ten years to fifty

years were suggested. The Department determined that a period of 25 years would reflect a reasonable ability to estimate depletions, given the current state of our knowledge, and a reasonable planning horizon.

In addition, the Committee did not reach a consensus that these were the only factors that should be considered. Other factors were suggested, however none of these suggestions indicated any methods that could be used to include these factors.

Considering the geographic area within which the Department considers surface water and ground water to be hydrologically connected for the purposes of any determination. There was no unanimous consensus on the Committee. However, there was a general consensus that the geographic area within which the Department considers surface water and ground water to be hydrologically connected for the purposes of any such determination should be based on an assessment of the amount of time that it would take for depletions from a well a certain distance from the stream to cause a depletion to the stream equal to a certain percentage of the amount of water pumped by the well over the same period. Any well within the boundary produced by this assessment would be considered hydrologically connected to the stream.

The Department proposed that this boundary be determined using the best ground water models available for the area. Where no valid ground water model existed, the determination would be based on the Jenkins method. The Jenkins method is the best sound-science approach currently available for use when the robust data sets needed to develop a valid ground water model are absent. This method has a long history of use for similar water administration purposes in other states.

Several Committee members questioned the accuracy of the Jenkins method for determining hydrological connectivity. A 1995 paper by Sophocleous, Koussis, Martin and Perkins was cited as stating that the method was unreliable. Sophocleous' paper compared the predictive capabilities of the Glover analytical model, the model from which the Jenkin's method was derived, against the reliable numerical standard offered by MODFLOW for a well 80 meters from a stream pumping for 120 days under increasingly complex conditions. This paper concluded that for a well this close to a stream and pumping for this short a time period, the range of discrepancy between the analytical solution and MODFLOW becomes magnified, and that the analytical Jenkins method consistently overestimated stream depletions, this resulting in more conservative decisions. However, the

results of this evaluation for a well this close to a stream and pumping for this short time frame, have little validity for an analysis of a well several miles from a river and pumping for several decades. In such cases, the impact of major factors of concern are considerably less. Dick Luckey from the U.S. Geological Survey examined Sophocleous' paper and determined Sophocleous' use of constant head lateral boundaries was a major reason that there were differences between the analytical and numerical models. When the boundaries were changed, the differences were within two percent. Luckey concluded that analytical solutions can be used to estimate stream depletions and estimates made close to the stream and in early times are more likely to be in error than estimates made further from the stream and at later times. Thus, when used on a regional scale, and over longer periods of time, the factors that cause the errors cited in the paper have much less impact.

During the course of the Committee's meetings, the Department was requested to and did provide sample maps using readily available information on hydraulic conductivities and storativity and applying the Jenkins method. These maps depicted the range of possible geographic location of the stream depletions line for a large number of tolerances ranging from .01 percent in a

hundred years, to 5 percent in -- or, let's see, 25 percent in 50 years. The Department suggested that the geographic area within which surface water and ground water should be considered hydrologically connected should be the areas within which pumping a well for 50 years will deplete the river or a base flow tributary thereof by at least ten percent of the amount pumped in that time. There was no consensus on the percentages and time period for this criterion. A number of Committee members argued that the extent of connectivity should be at the 28 percent/40 year line, whereas others strongly promoted a level of connectivity closer to one percent to five percent in 100 years. Those arguing for the 28 percent/40 year line did so in part based on the fact the 28 percent/40 year line was used for the designation of the over-appropriated areas in the Plate River Basin and is being used in the Platte River Cooperative Agreement. However, in both of these instances, the intent of the line was for other purposes. It was not intended to define the level of hydrologic connectivity.

In choosing the ten percent/50 year criterion, the Department tried to delineate a line beyond which the depletive effects of wells would have a de minimis impact on stream flows within the 25 year planning horizon. In discussions with Committee members and others, the

concern we raised that because the ten percent/50year delineation would cause management areas to extend across Natural Resources District's boundaries, it would be very difficult to implement a management plan. This problem occurs because ground water aquifer divides do not coincide with the administrative boundaries of the Natural Resources Districts, and wells pumping in one Natural Resources District can affect stream flow in another Natural Resources District. This problem was anticipated by the legislature, and hence the statutes in Section 46-703(4) state, "The Legislature recognizes that ground water use or surface water use in one Natural Resources District may have adverse affects on water supplies in another district or in an adjoining state. The Legislature intends and expects that each Natural Resources District within which water use is causing external impacts will accept responsibility for ground water management in accordance with the Nebraska Ground Water Management and Protection Act in the same manner and to the same extent as if the impacts were contained within that district. In such cases it is the expectation of the Department that a single plan for the area that will accomplish the required goals of the statutes will be developed jointly by the Department and the affected Natural Resources Districts, and that the

plan will be implemented by the Natural Resource District that has jurisdiction over the land involved."

At this time, I would like to offer the following additional exhibits into the record.

Correspondence in opposition to a Department rule, which would utilize a ten percent/50 year delineation as follows:

Exhibit 9, copy of the Nebraska Association of Resources District Resolution dated June 20th, 2005, received via email from Ron Bishop, manager of the Central Platte Natural Resources District.

Exhibit 10, a letter from the Nebraska Electric Generation and Transmission Cooperative, Inc., dated June 27th, 2005, and resolution dated June 24th, 2005.

Exhibit 11, a letter from the Southern Power District dated May 17th, 2005, and resolution dated May 11th, 2005.

Exhibit 12, a PowerPoint by Dr. Ray Supalla presented to the negotiating rule committee.

Exhibit 13, Justification for Minimal Irrigation Requirement Definition by Dr. Ray Supalla.

Exhibit 14, the paper by Sophocleous, et al, previously cited in my testimony.

Exhibit 15, a graph depicting the stream depletion lines over time.

Exhibit 16, letter of testimony from Ron Klein.

Exhibit 17, a letter of testimony from Brian Barels.

Exhibit 18, written testimony by Dennis Strauch.

Exhibit 19, written testimony by Rex Amack of the Nebraska Game and Parks Commission.

And Exhibit 20, correspondence from Richard Luckey of the US Geological Survey.

So at this time, I'd like to offer into the record, Exhibits 6 through 21.

Oh, I'm sorry, I forgot to mention Exhibit 21, which is the written testimony of the Department.

THE HEARING OFFICER: Exhibits 6 through 21 will be received into the record at this time.

(Exhibits 6 through 21 were received in evidence. See Index.)

Okay, at this time, I'd like to invite the persons who signed the testimony sheet to provide testimony. In order to give everyone who wishes to testify an opportunity to do so, I would ask that each person limit their testimony to five minutes. You may ask for additional time prior to testifying if you need it. However, if your additional testimony appears to be repetitive, we will ask that you wrap up your testimony.

I would ask that those who may need more than five minutes time for testimony to testify after those whose testimony will be five minutes or less.

The first person I have listed is Dale Wiles. I would note that if you've signed the testimony and don't wish to testify, that's all right too, just let me know.

Will you be offering your written testimony as an exhibit then?

MR. WILES: Yes.

(Marked Exhibit 22 for identification.)

The testimony -- My first testimony will be for the Upper Elkhorn Natural Resources District. Good morning, my name is Dale Wiles, and I'm testifying on behalf of the Upper Elkhorn NRD. I am currently the chairman of the Upper Elkhorn NRD Water Resources and Watershed Committee. I appreciate the opportunity to testify on the rules and regulations that have been presented today, because it involves one of Nebraska's greatest resources, water.

Having attended various meetings held by the Water Task Force, and Negotiated Rulemaking Committee, it is evident that the members have struggled on making some important decisions or coming to a consensus. A couple of the decisions that consensus could not be reached by

the Negotiated Rulemaking Committee was the 10/50 boundary, and the 85 percent and 65 percent annual surface water diversion for crop irrigation requirements that have been proposed by DNR today.

The Upper Elkhorn NRD passed a resolution in our June board meeting to oppose the 10/50 line, and support the 28/40. The Upper Elkhorn NRD's actions support the position that NARD has taken on this issue. The Upper Elkhorn NRD does not agree with how the proposed 10/50 standard line has been determined to be the best standard for hydrologically interconnected -- connection between ground and surface water. Various proposals for this standard have been discussed, and none of them have truly had any technical merit of why one should be supported over the other. The standard that most people became aware of was the 28/40. Te 28/40 line has been used in determining areas of the state that have been determined over-appropriated. The hydrologic area impacted by the 10/50 line seems to be more stringent for fully-appropriated than it was for the over-appropriated.

Maps have been developed to illustrate various standards that have been considered and how they could possibly impact water basins in Nebraska. Many of those standards went outside of the NRD boundary lines, and into other water river basins. NRD's are proud of how

they have worked together over the years to address various environmental issues; however, there probably has not been a regulation in the past that has been -- has had more impact on adjoining NRDS than this proposed standard. If and when the Elkhorn River basin is determined to be fully-appropriated, it will be a difficult task to convince residents within our own basin that they are fully-appropriated, and even more difficult to convince residents outside our NRD boundary line that they are included into a designation to understand they have an impact on one or several river basins. Keeping the standard at 28/40, or to the NRD boundary lines would probably be more acceptable to the general public. It would seem that the administration and development of the Integrated Management Plans by NRD and DNR would also be easier to designate areas that would be kept within the NRD boundary lines.

Stream flow availability and lag effects are important issues that need strong consideration for further studies and understanding. Prior to the basin being labeled fully-appropriated, we feel it is important that DNR review past stream flows and potential effects from ground water pumping to see if they mirror what is happening today in the streams. Regarding stream flow availability, what were surface water appropriators

guaranteed when their surface water rights were appropriated? Before giving those rights, what kind of assessment was performed by DNR to determine historically the water was there? Does the standard that is being proposed in the proposed rules and regulations today follow those guidelines when the surface water right was granted? Projecting lag effects from ground water pumping also appears to be difficult to determine with some limited geology and hydrological information in some basins. We strongly encourage the DNR to consider these questions and comments.

On behalf of the Upper Elkhorn NRD, we want to thank DNR for holding these hearings, and consider our comments.

THE HEARING OFFICER: And you are offering that testimony into the record?

MR. WILES: Yes, I am.

THE HEARING OFFICER: Exhibit 22 will be received into the record.

(Exhibit 22 was received in evidence. See Index.)

MR. WILES: The second testimony that I am going to have is going to be a letter from Mike Allen, and this was also to be -- Mike is unable to be here, and I have indicated that I would read this for him. He is

also testifying on behalf of the Nebraska Well Drillers Association.

"I am testifying both and on behalf of the Nebraska Well Drillers Association. We share a common interest in working with the state agencies, legislature, and other stakeholders in formulating a public policy to protect the waters of Nebraska and promote beneficial use to this resource based on sound science and local control. The Nebraska Well Drillers Association serves as a valuable resource to provide technical information on the aquifers of this state. I have been serving for the past six years as the manufacturer's representative to the Water Well Standards and Contractor's Licensing Board. I also serve on the Nebraska Water Resources Association Board of Directors, the Technical Advisory Committee to the Ground Water Foundation, and I am on the steering committee for the Nebraska Policy Institute's study on the Economic Importance of Irrigated Agriculture to Nebraska's Economy. Most recently I served representing the Nebraska Well Drillers Association on the Negotiated Rulemaking Committee for LB962.

Having participated in the rulemaking process, we are not as concerned with the rules itself, as the applications of the rules and the information that will be used to support it. There are certain aspects of the

proposed rules and the Nebraska Well Drillers Association and I do not agree with. Such as using over-simplified models abandoning the current 28 in 40 year depletion line that has been the standard for policy decision-making over the last ten years. However, we realize that this effort is a compromise, and we do not live in a perfect world so that some reliance and generalization of models will have to be done. Our primary concern is too much reliance will be placed on general information, not necessarily science. That does not accurately reflect the true relationship between the surface water and ground waters that make up Nebraska's hydrological climate. Therefore, we take exception to any interference criteria as it relates to both impacts and future lag effect impacts unless methods used to arrive at these determinations are calibrated and validated against historical stream flows and other data.

Further, we take exception to the rules and consequences resulting from the rules and regulations that adversely affect the property rights and freedoms of citizens of this state without reasonable scientific proof beyond speculative assumptions generated by excessive reliance on modeling techniques. Again, the criteria used for decision-making must be validated with historical information. The social, environmental, and

economic importance of this resource is simply too important to jeopardize it by convenient political solutions. Contrary to environmental political correct idealisms of today, that it is better to deny any further access to mitigate any damages that may have or be occurring, it is no less important to consider the environmental (sic) importance of the resources of the people of Nebraska.

Nebraska Well Drillers Association will support rules to protect the waters of Nebraska, while guaranteeing beneficial access to this resource, as long as these same rules are supported by science that can be verified by empirical data. Thank you."

THE HEARING OFFICER: Will you be offering that into the record?

MR. WILES: It's a pretty rough draft, but I will offer it. Yes, I am. I'm sorry, yes.

THE HEARING OFFICER: It will be marked as Exhibit 23, and it will be received into the record.

(Exhibit 23 was marked and received in evidence. See Index.)

UNIDENTIFIED VOICE: What was the name of the person for whom you were testifying, Mr. Wiles?

MR. WILES: Mike Allen.

UNIDENTIFIED VOICE: Thank you.

THE HEARING OFFICER: And just as a reminder, as people come forward to testify, I'd like you to be sure and spell your first and last names so our court reporter can get that accurately in the record, as well as idenfiying who, if anyone, you're speaking on behalf of.

The next person I have listed on the testimony sign-in sheet is, I believe it's Dan Manwarren.

MR. MANWARREN: I'm testifying on behalf of myself. And my background is in irrigation from 1971 in two states, Kansas and Nebraska.

THE REPORTER: Can you spell your name for me, please?

MR. MANWARREN: Dan, D-a-n Manwarren, M-a-n-w-a-r-r-e-n.

THE REPORTER: Thank you.

MR. MANWARREN: Okay. And I am not testifying about any specific rule that is being proposed, I'm just testifying more on basic philosophy behind these rules. I have two points.

My first one being that because -- and I'm basically speaking to ground water because I have very little knowledge of surface water. But concerning ground water, the aquifers under this state are buried considerably, both in the yield and even within local

areas the availability of the water to the aquifer. Therefore, I think that all of the administration of the rules should be handled by the local ground water management districts and not by the State. I think the State has an obligation to determine where there are problems, but I think that it's up to the local districts to administer these problems, and to take care of them.

My second point is that I see the State of Nebraska on the ground water use and ground water rules inching further and further toward the first in time, first in right water regulation as in many other states. And what this gets down to is that it's the first hog at the trough gets the water. The rules that have been proposed that -- excuse me -- that are judging the over-appropriated and the fully-appropriated use of denying permits arbitrarily in this area that is determined to be fully appropriated is strictly a first in time, first in right situation. The State has no business in determining the values of land, and that's exactly what this does. It also does not address the problem. It does not take care of the problem. The only thing that will take care of the problem is to reduce the amount of water that is being appropriated or being used, the amount of water being used in the area that is over-appropriated. And that can only be done by reducing the

amount of withdrawals, not by limiting any additional withdrawal. That is the easy way out. To deny permits is just an easy way to -- for -- administratively say that they're doing something, and they're not having any additional use or any additional withdrawal of the water. The only way to do this and to do it fairly is to treat everyone fairly. And if we have to reduce our use by ten percent in a local area, then it should fall equally upon all users in that area. It should not be on this basis of denying new permits. I'm very much opposed to that.

Another thing that really irritates me, I mean, it brings my hackles up, is when you start talking about junior rights. There should be no such thing as junior rights. Everyone should have equal access to it. That's my testimony. Thank you.

THE HEARING OFFICER: Thank you. The next person I have listed, I believe it's Evan Alm? Oh, I'm sorry, Erik Alm. Sorry about that.

MR. ALM: I've been called worse. Director Patterson, Deputy Director Bleed, my name is Erik, E-r-i-k Alm, A-l-m. I'm a director of Lower Platte North NRD. I chair the water committee. Our district proposed three changes to your proposed rules and regulations by motion with unanimous vote. Our board wishes to go on record opposing the portion of the proposed rules and

regulations which would set the standard at ten percent depletion over a 50 year time span. In history in Nebraska the settlement of interstate compacts have never used anything except the standard of 28 depletion over 40 years. We do not wish to change the rules in the middle of the game, especially without a good reason.

Second, we feel the boundary lines should stop at the NRD boundaries when both NRDs are declared fully or over-appropriated there is little incentive for an NRD to enforce regulations from another district. We will do our job if reasonable rules are governed for us.

Third, we propose that integrated management plans be designed to protect surface water rights, which exist 90 percent of the time. In the case of the Lower Plate River instream flow right the cubic feet per second rate was set at 20 percent of the historical season flows. We find it unfair to ask us to protect to a level which is only present once out of every five years.

Respectfully submitted, Erik Alm, Director, Lower Platte North.

THE HEARING OFFICER: Would you like to put your written testimony into the record?

MR. ALM: Yes, ma'am, I would.

(Exhibit 24 was marked for identification and received in evidence. See Index.)

The next person I have listed to testify is Marlin Rupel (sic) or Rempel. I'm sorry about --

MR. REMPEL: I will bypass.

THE HEARING OFFICER: You will bypass?

MR. REMPEL: Yes.

THE HEARING OFFICER: Would you like to be coming up later with more than five minutes, or do you wish to bypass altogether?

MR. REMPEL: At this time I would bypass, however, it will take longer than five minutes.

THE HEARING OFFICER: Can I ask you to spell your last name so we have it for the record.

MR. REMPEL: R-e-m-p-e-l.

THE HEARING OFFICER: R-e-m-p-e-l. Thank you.

The next person I have listed on the testimony sign-in sheet is Don Blankenau. And I take it you would like to wait until later?

MR. BLANKENAU: Yeah, it will take about ten minutes.

THE HEARING OFFICER: Okay. We'll get back to you then after we've got the five minute testifiers come to.

The next person I have listed is Don Adams.

MR. ADAMS: Good morning. My name is Don Adams, D-o-n A-d-a-m-s. I'm executive director of

Nebraskans First state-wide coalition of ground water irrigators dedicated to protecting Nebraska's ground water for agriculture. In last Sunday's World-Herald, outgoing Department of Natural Resource Director, Roger Patterson, said this about his proposed rules on declaring fully-appropriated basins, quote, "People are going to hate it." I'm here today to validate Mr. Patterson's assessment.

Back in September of 2003, the Water Policy Task Force, which is co-chaired by Mr. Patterson, issued a press release that included a promise to NRDs and irrigators that the Task Force would not seek a state-wide ban on the drilling of new wells. The big headline in the World-Herald read, quote, "State Says No Ban Planned on New Wells," end quote. Task Force co-chairman Senator Schrock said, quote, "The Task Force believes that local control of ground water by NRDs needs to be retained and should not be changed," end quote. If the proposed rules, which are the topic of this hearing today, are adopted, this promise will be broken as the DNR will use these rules to declare virtually all of the eastern half of the state where irrigation is a factor as fully appropriated. Once this happens, an immediate stay on the drilling of new wells goes into effect. The stay will also stop any increase in irrigated acres. Already,

most of the western half of Nebraska has been shut down to any new ground water irrigation development. Some day before next Friday, Mr. Patterson will sign off on these rules. These rules will then carry the force of law, and thereby make the highly controversial LB 962 far worse than ever contemplated by the Task Force or anyone else. Then, next week, Mr. Patterson will leave state government and become a private consultant. It is because of this situation that Mr. Patterson should not be making this decision on these proposed rules that he alone developed, contrary to the wishes of a committee that he himself convened to develop a fair set of rules for all concerned. This committee was eliminated by Mr. Patterson when it refused to reach consensus on Mr. Patterson's proposals.

There is absolutely no need whatsoever to force these rules upon us now, other than the fact that Mr. Patterson is leaving state government and wants the matter settled. These rules involving the connectivity of ground water and surface water, the so-called lag effect, and the standard of surface water appropriations fulfillment are purely arbitrary and woefully lacking a basis in sound science. These rules involve over-reaching because they will allow state intervention and control into areas of this state where there are no

problems even remotely akin to the problems western Nebraska is experiencing due to the prolonged drought. In the west, these problems are being aggressively dealt with by the NRDs out there. These rules are extreme because they will adopt a standard of ground water/surface water connectivity that is way out of line with the so-called 28 percent/40 year standard that has been recognized and accepted standard for at least the past 30 years.

These rules will harm our agricultural-based economy, and effectively put a great big "Closed to New Business" sign up. In a state like ours where irrigation is a necessity, not a luxury, these rules make no economic sense. The livelihood of hundreds of thousands of Nebraskans who are directly or indirectly dependent on irrigated agriculture production will be impacted. Our ground water is a resource that must be used to generate new wealth that enhances land values, sustains our local tax bases, and maintains our high quality of life. Wise management of our ground water requires that in dry periods, such as now, we draw upon and even draw down the aquifers, and use the water for a beneficial purpose so later recharge can occur during wet periods. Mother nature allows for this give and take.

These rules will essentially turn our ground

water into stone. Farmers who have invested in irrigable land with the hopes of some day putting in a well to irrigate their land will be hung out to dry. This devaluation of their property right is a serious matter and flies into the face of the correlative rights, share and share alike doctrine that has been the laws of Nebraska since the advent of ground water irrigation. These extreme rules will allow the DNR to control the means of agricultural production. This is not a good thing.

It is imperative now that Governor Heineman intervene and instruct the DNR to go back to the Negotiated Rulemaking Committee and develop some new rules that are reasonable, less intrusive, and not harmful to the economy and our producers. This matter is of such importance that the governor's intervention is desperately needed right now.

Finally, holding these kinds of hearings during prime irrigation season is so unfair to all those who will be most affected by the government action at issue. Additionally, we wonder why only one public hearing is being held on such an important state-wide issue. Our government should operate in slightly more fair and accommodating manner. In fact, the Nebraska Administrative Procedure Act, Section 84-908, says that,

"No adoption of any rule shall become effective until it's approved by the governor. And the governor, in it's considerations of the proposed rule, shall include in his considerations, number two, whether reasonable and convenient opportunity for public comment was provided for the geographic area affected by the rule and regulation. If a public hearing was not held in the affected geographic area, reasons shall be provided by the agency to the governor." It is clear that 84-908(2) has been violated. This gives the governor the clear option now to not approve these rules, to reconvene the Negotiated Rulemaking Committee, and hold hearings additionally in Fremont, Columbus, Norfolk, York, and maybe a couple of other places. Thank you very much.

THE HEARING OFFICER: Don, would you like to offer exhibits?

MR. ADAMS: Yes.

THE HEARING OFFICER: Exhibit 25 is received into the record.

(Exhibit 25 was marked for identification and received in evidence. See Index.)

The next person I have listed is Larry Hutchinson.

MR. HUTCHINSON: My name is Larry Hutchinson, L-a-r-r-y H-u-t-c-h-i-n-s-o-n. I've been asked by my

agency to provide a summary of a testimony provided earlier. Game and Parks Commission is the lead agency authorized to manage fish and wildlife, park and recreation uses in Nebraska. Our mission is stewardship of the state's fish, wildlife, park and outdoor recreation resources in the best long-term interest of the people of Nebraska and the resources. We have, in our agency, a system of wildlife management areas, state recreation areas, state parks, almost all of which adjoin waterways, lakes and reservoirs. Many of these exist in association with irrigation, power generation and flood control projects that rely on surface water appropriations.

In addition, the Game and Parks Commission maintains five fish culture facilities that include the Republican, Platte, Niobrara, Loup, and Elkhorn River basins. The Game and Parks Commission holds the first instream flow appropriation and along with the Central Platte Natural Resource District, has other instream appropriations for the protection of public trust fish and wildlife resources of the Platte River. Regardless of which entity holds instream appropriations for these purposes, the resources for which they were granted are the property of state residents, and deserve diligent protection. Nebraska Game and Parks agrees that the ten

and 50 year rule is considerably better than the 28 and 40 year proposal. However, we still believe that the valuation of the Nebraska River basins needs to be considered -- needs to consider broader geographic scope of hydrologically connected ground water to incorporate all but de minimis amounts of depletions. Nebraska has recommended, and has continued to recommend that the rule be amended to expand the geographic scope to include two-and-a-half percent of depletion for 50 years of pumping. Nebraska appreciates the opportunity -- or our agency appreciates the opportunity to provide information and recommendations at this hearing.

THE HEARING OFFICER: Thank you. And we already have received a copy of that testimony into the record earlier.

MR. HUTCHINSON: Yes.

THE HEARING OFFICER: The next person I have listed to testify is Ron Bishop.

MR. BISHOP: I'm going to need two or three extra minutes.

THE HEARING OFFICER: Okay. How about we go through the list and see if the rest that can limit it to five can go first.

The next person would be Dave Thom.

MR. THOM: Good morning. My name is Dave Thom,

D-a-v-e T-h-o-m. I'm representing T & L Irrigation Company, a center pivot manufacturer here in the State of Nebraska. It's a sad day in the state of Nebraska when it is necessary to impose a moratorium on new irrigation development. Irrigation is the life blood of Nebraska. The economical impact and effect of this is huge, not only on land values that basically can drop in half over night, but also on the whole infrastructure that supports irrigated agriculture in this state. The day that we put irrigation moratoriums in this state on, that are not necessary, is a very, very sad day, and it's wrong. Thank you.

THE HEARING OFFICER: Thank you.

The next person I have listed is Duane Filsinger.

MR. FILSINGER: Good morning. My name is Duane Filsinger, that's D-u-a-n-e, last name Filsinger, F-i-l-s-i-n-g-e-r. I'm the manager of the Lower Niobrara NRD, and I'm testifying this morning in the -- representing our 17-director board, and the citizens of the Lower Niobrara NRD. I wanted to thank you for this opportunity to talk this morning.

I want to just cover three areas real quick. First of all, the Lower Niobrara supports the testimony that Mr. Dave Nelson will be giving on behalf of Nebraska

Association of Resource Districts. And I'll not get into that because it will be repetitious. I'll let Dave do it. And then we have two other areas. First of all we support the 28 percent/40 year concept, and use several examples such as the 28 percent/40 year concept was outlined way back in 1981 in the Missouri River Basin States Association Study. It's a concept that was used in the Nebraska versus Wyoming case as a boundary. The Natural Resource District has used the 28 percent/40 year line for years in temporary well drilling suspensions, and the 28 percent/40 year line was used by the Department of Natural Resources for the boundaries of the over-appropriated area of the Platte River. And that just is some of many examples where this has been used.

Thirdly, our concern is the fact that there may be use of the concept of the ten percent/50 years. We have no information that this has been used in the past, and we do feel that the 10/50 figure that is used, that more areas of the state of Nebraska will move from under- to fully-appropriated. This will cause the NRDs additional acres to manage, change in our management plans, having to add additional staff, and additional cost to cover the change in midstream. And also in our own area, we feel that the Niobrara River and the Niobrara River Basins will be affected by rulings on the

Elkhorn River if the 10/50 percent line is used. And we just feel that the changes I have mentioned are unnecessary. And the only avenue that we have to recover the cost that it will cost us to hire additional help and change our plans, is that we need to tax and raise the tax levy in our own district.

The Lower Niobrara is currently working with the Department, and we strongly urge that the DNR use the 10/40 line for all designations in the future.

Thank you for your time, and I'd like to offer this as testimony.

If you bring it up, we'll mark it as Exhibit 26.

(Exhibit 26 was marked for identification.)

THE HEARING OFFICER: Exhibit 26 is received into the record.

(Exhibit 26 was received in evidence. See Index.)

The next person I have listed is Robert O'Dell

MR. O'DELL: I would defer for now. Thank you.

THE HEARING OFFICER: Is your last name spelled, O'D-e-l-l?

MR. O'DELL: Yes, ma'am.

THE HEARING OFFICER: Thank you.

The next person I have listed is Clint

Johannes.

MR. JOHANNES: Good morning.

THE HEARING OFFICER: Good morning.

MR. JOHANNES: My name is Clint Johannes, C-l-i-n-t J-o-h-a-n-n-e-s. I'm the assistant general manager of the Nebraska Electric Generation and Transmission Cooperative. I will be testifying on their behalf this morning. I'm also member of the Water Policy Task Force representing power, and then currently chairman of the Lower Platte North NRD.

The Nebraska G&T at their June 24th board meeting discussed these rules and proposed for the basins and passed resolutions. And I believe that Deputy Director Bleed entered that into -- as an Exhibit. And I'm not sure of the exhibit number, along with a letter that I wrote to Director Patterson, so --

THE HEARING OFFICER: That is correct.

MR. JOHANNES: I would just like to expand a little on that resolution. We support the LB962 proactive approach, and want to avoid having he remaining portion of the state becoming over-allocated. However, we strongly feel that the 28/40 boundary should be the standard used. It was the only boundary that I recall being discussed with the Water Policy Task Force. And the Task Force, I felt, was led to believe that this

would be the standard that was used. Broadening the boundary to 10/50 standard in the remaining portion of the state where the determination of fully-allocated is to be made before January 1, 2006, will result in many wells being located in two, and maybe as many as four, hydrologically connected basins. This large overlap we feel, will lead to problems. NRDs will be forced to having the same integrated management plans and will lose the flexibility that they necessarily need.

It will also be more difficult to explain and get public support. This overlap issue has not been addressed, or needed to be addressed in those basins that are currently, either fully- or over-allocated in either the Republican or the Platte basins. Because of the geology, and probably the tighter web of tributaries in the east and northeast part of Nebraska, 28/40 boundary could generally result in the entire area being hydrologically connected. The 10/50 just causes more overlap. It would be most logical and easier to explain if the NRD boundaries were used for the fully-allocated boundary. There is not sufficient science of information to be so accurate that NRD boundaries would not be a satisfactory proxy.

Another area that we have concern with the rules is how the instream flows are used in the fully-

allocated determination. When these flows were granted, most flows were expected to be available only about 20 percent of the time. This should be the same standard used in the determination of fully-allocated. If calls were made on junior rights in the past for flows needed above the 20 percent, this was also wrong.

Thank you for the opportunity to provide our comments and concerns. We respectfully request that you make modifications to the proposed rules to respond to these concerns. Thank you.

THE HEARING OFFICER: Thank you. Do you wish to place your --

MR. JOHANNES: Yes.

THE HEARING OFFICER: It will be marked as Exhibit 27.

(Marked Exhibit 27 for identification.)

And Exhibit 27 is received into the record.

(Exhibit 27 was received in evidence. See Index.)

The next person is Scott Merritt.

MR. MERRITT: My name is Scott Merritt, S-c-o-t-t M-e-r-r-i-t-t. I serve as executive officer of the Nebraska Corn Growers Association. We'd like to provide some testimony today on behalf of the Association on Rule (sic) 475, Chapter 24. I will submit a written testimony

for the record, and in essence of time, I might just hit on a couple of the main points. NeCGA has, and continues to support the basic concepts and the intent of the Governor's Water Task Force, and LB926 over the past few years. We believe in the need to develop and implement a rational state-wide water management plan. NeCGA is currently opposed to the 10 percent/50 year rule as it's outlined. Rather, we would support a 28/40 year line. We believe for several reasons this is a more acceptable rule that could be utilized, and it provides more clear definition.

The second area of concern is the information that would be used to implement the process. We support the outlined rule and agree that the best available science should be used in utilizing the determination. We also believe that this process is ongoing, and has a margin for error. And we would like to see a more transparent component utilized, which allows for independent review of third parties, to provide a more check and balance to the system.

With that, we would like the Department to reconsider some of the proposed rules.

THE HEARING OFFICER: Thank you. This will be marked as Exhibit 28, and is received into the record.

(Exhibit 28 was marked for identification and

received in evidence. See Index.)

Next on the list is David Nelson.

(Marked Exhibit 29 for identification.)

MR. NELSON: My name is Dave Nelson. I am a Tri-Basin NRD director, and I'm also president of the Nebraska Association of Resource Districts. Our primary concern from the NARD side is with the rule that the 10 percent depletion in 50 year rule as a standard for deleting (sic) fully-appropriated river basins. We believe this is an unworkable standard to use when making determinations and implementing corresponding local NRDs and rules and regulations. Excuse me. All other determinations of hydraulic (sic) interconnection between ground water and surface water made by the State of Nebraska in the past have used this 28 percent and 40 years. Following are just a few examples.

Nebraska's new depletion plan for North Platte River Co-operative Agreement uses 28/40 as a management boundary. This standard has been a feature of this management plan since the first drafts were made in 1998. Nebraska agreed to use the 28/40 as a boundary line in the settlement with Wyoming. The Department of Natural Resources used the 28/40 boundary for over-appropriated parts of the Platte River shortly after the passage of LB 962. During the discussion of the Water Task Force

Policy (sic) in the development of LB 962, we believe that the 28/40 line would be the standard that would be used for the rest of the regulations. To change the standard now to the 10/50 creates several problems for local administration of Integrated Management Plans. The 10/50 line goes beyond NRD boundaries. Using the 10/50 standard, DNR would ask an NRD to regulate ground and surface water in the Platte basin to benefit water users in the Loup basin. It also creates a situation where districts in the Loup basin could be asked to develop plans to manage for drainage in the Elkhorn basins. The problem to overcome is, is that the Platte is not a tributary of the Loup, and the Loup is not a tributary of the Elkhorn, nor does the ground water generally move from the Platte to the Loup basin, or from the Loup to the Elkhorn basin. NRDs will have a difficult task convincing constituents to accept regulations that appear to defy common knowledge of ground water and surface water movement.

NRDs in the Platte and Upper Niobrara White basins are in the process of developing management plans. Using this rule an interested party could request that the district's integrated management boundaries be re-assessed. This rule would also make districts go back to their constituents to explain that the scope of the

regulations have changed since the 28/40 lines were established just two years ago. Stakeholder groups have already been established, and plans are being developed. A change to the 10/50 line could cause districts to start over with their plans. Part of the apparent motivation of some opponents (sic) of 10/50 and other broader standards for interconnection is an unfounded concern that NRDs would not regulate water use in their districts. On the contrary, NRDs have already gone beyond the Department's requests on regulatory boundaries. For example, the Upper Niobrara-White NRD board of directors chose to include their entire district in their management plans rather than leaving a portion out as suggested by DNR. The North Platte and South Platte NRDs have also expanded management beyond the 28/40 lines to address their concerns. Other NRD boards will also likely take a comprehensive approach to integrated water management plans within their districts.

NARD recommends a change to the proposed rule to address these concerns. The logical choice would be to use the 28/40 line for all fully-appropriated basin designations. This would keep the regulation consistent with past determinations. We also recommend that fully-appropriated designations stop at NRD boundaries or river basins boundaries to avoid the problems of regulating

water users in one river basin in an attempt to benefit those in another.

Another concern with the proposed regulations is that there is no standard for determining whether instream flow water rights are being satisfied. When instream flows for fish and wildlife were granted on the Platte River in the 1990's, an agreement was reached that ground water would not be regulated for the management of the instream flow. This compromise was reached because some of the instream flows granted occurred as frequently (sic) as 20 percent of the time. LB 962 allows all water users to be regulated for instream flows, but is not mandatory. We do not believe that this is a reasonable requirement for the NRD to manage ground water to protect flows that occur only 20 percent of the time. Therefore, we recommend that integrated management plans be designed to protect only those surface water rights that rely on stream flows that occur at least 90 percent of the time. This is an attainable goal.

Another problem with the regulations is the standard for accounting for lag effect of ground water pumping. The proposed 25 year lag effect standard is too long a period to expect to be able to estimate with any degree of certainty due to changes in crop patterns, farm programs, weather, water use, and a host of other

factors. We do not believe that the best computer hydrology models are accurate enough to estimate the lag effect. Further, we do not believe that it is necessary to make such speculative estimates when LB 962 requires DNR to annually review the level of water use in Nebraska's river basins. Thus, we recommend dropping that portion of the rule.

Finally, ground water recharge from stream flows is not addressed in the regulations. The rule assumes that all portions of rivers are gaining streams. Hydrology does not support that assumption. Nebraska streams have both gaining and losing segments. The losing segments provide ground water recharge and are not considered. Surface water diversions impact ground water recharge, however, these factors are not considered in this rule. Thus, we suggest that these factors be accounted for. So the NARD and the NRDs are more than happy and willing to work with the DNR to help resolve these problems. Thank you.

THE HEARING OFFICER: And we've marked your written testimony as Exhibit 29, and it will be received into the record at this time.

(Exhibit 29 was received in evidence. See Index.)

Next on our list is Carroll Sheldon.

MR. SHELDON: My name is Carroll Sheldon, Kearney, Nebraska. I'm on the Central Platte NRD Board. I'm also chairman of the Water Resource Committee on the NRD Board.

Roger, no affront to you, but if anyone is setting in the lame-duck chair, you are. I don't know why you're here, but I have a good idea, to try to throw this thing up at us, the 50/10 and hope that maybe 51 percent of the people are asleep and might buy into some part of it. I don't mean that about you personally, Roger. You can't be all bad because you drive a classic Corvette. So, it's not personal. Plainly stated, the rules as proposed are unacceptable. I want to say that again. The rules as proposed are unacceptable. As a duly elected public official, I have a duty to do my best to help wisely manage our water resources, while at the same time, protect the rights of land owners to use the water under their land for beneficial purpose of irrigation. Three recent Supreme Court rulings had clearly stated that NRDs and not the State DNR are the government bodies that regulate ground water use. We thank our Supreme Court for issuing these accurate rulings, and we press on accordingly. Those proposed DNR rules are purely arbitrary criteria that is completely lacking in sound science. The 10 percent/50 year

criteria is so far out in left field, it is ridiculous. The DNR came up with it out of the blue, and we will not accept it. Period. No statistics, facts, testing, flow models, on-site water testing, there is no basis to approach us with this 50/10. It's a blatant disregard for factual information and studies. Our board has many questions on the ground water/surface water interrelationship issue. I can safely say that no state or federal government program will be forced upon us until all questions are answered adequately. The COHYST and Cooperative Agreement Program both have a long way to go before they earn our endorsement. They are far from being done deals. We will not be pushed by the State DNR or the US Fish and Wildlife, or anyone else to sign-on to any regulatory program that is not fully supported by sound science. Let me read you some facts here.

Nebraska new depletion plans, the Platte River Cooperative Agreement, uses a 40/28 percent as a management boundary. Nebraska agreed to use 40/28 as a boundary in the Nebraska versus Wyoming settlement. The director of the DNR asked our NRD to impose a suspension of drilling new wells in the western part of our NRD above Elm Creek within the 40 year/28 percent. The Department of Natural Resources set the 40/28 percent boundary for over-appropriated parts of Central Nebraska

NRD. During the past centuries, the farmers here in Central Platte built this area up from nothing into many prosperous communities with a high quality of life. We will not allow any government program to destroy what we and our forefathers have built.

I would like to, at this time, in order to take back an idea of the feeling of the people at this hearing, I would like to have a showing of hands of everyone who opposes these rules as proposed on the 50/10 percent area. Showing of hands against it.

(Raising hands)

Thank you. It doesn't take long to tell how these people feel. At this time, I think all stakeholders, that is people who own, operate land, businesses and so forth in this area, are very sincerely dedicated to working on the 40/28 and against the 50/10. At this time, we call on Governor Heineman to step in now and stop these rules from being adopted as state law procedure has not been followed on these. And I want to go on record as our 21 members of the Central Platte NRD voted unanimously against the 50/10. Thank you.

THE REPORTER: Could you spell your name on the record for me, please?

MR. SHELDON: Yes. Carroll Sheldon, C-a-double r-o- double l S-h-e-l-d-o-n, Kearney, Nebraska.

THE REPORTER: Thank you.

MR. SHELDON: Thank you.

THE HEARING OFFICER: Do you wish to submit your written testimony into the record?

MR. SHELDON: No, they're just --

MR. PATTERSON: Do you wish to provide the outgoing director with a new Corvette?

MR. SHELDON: Yes.

THE HEARING OFFICER: The next person I have listed on the testimony sheet is Stan Staab.

(Marked Exhibit 30 for identification.)

MR. STAAB: Good morning. Thank you for the opportunity to testify today. I'm providing comments to you on behalf of the Lower Elkhorn Natural Resource District Board of Directors, 15 in number, headquarters in Norfolk, Nebraska. I represent parts of 15 counties in the northeast. Stan Staab, spelled S-t-a-a-b, general manager for the district. I wish to make it very clear that our NRD recognizes the importance of LB 962, and we intend to fully comply with the law. However, these rules and regulations as written by DNR are extremely important to our basin and the future of our citizens.

In our opinion, these rules and regulations should contain sufficient detail to be properly interpreted, but your current language does not provide

adequate definition to accomplish this. We respectfully request that DNR consider our comments, provide appropriate answers to our questions, and revise these rules and regulations accordingly. If our basin is deemed to be fully-appropriated on January 1st, 2006, or at any other time, the Lower Elkhorn NRD strongly supports the 28/40 rule over the 10/50 rule. We believe this is a fair and consistent standard. In addition, we are providing the following concerns in order of priority.

The availability of stream flow. We question the basis for utilizing the junior surface water rights to determine the availability of stream flow. DNR currently performs no assessment of historical availability of stream flow prior to granting rights and provides no guarantee to landowners that any amount of this right will be available. Thus, the basin could be fully-appropriated when there is no ground water use. We suggest that an assessment of stream flow data prior to large-scale ground water development of ground water in the 1970's should be performed to determine if, on average, 85 percent, May 1 thorough September 30, inclusive, and at least 65 percent, January 1 through August 31, inclusive, would have been available to junior surface water users.

Non-irrigation rights. DNR should define all types of non-irrigation rights, and their complimentary standard of delivery appropriate for each use. In much of eastern Nebraska, definition of standard of delivery or in-stream flow rights could most likely have a serious impact on basin designations. When the in-stream flow right was granted in 1996, there was an agreement between DNR, Nebraska Game and Parks, affected NRDs and other affected users that ground water would not be regulated for the management of specific -- of that specific in-stream flow right. To honor this agreement, we strongly feel this in-stream flow right should not be considered when calculating the ability of stream flow.

Hydrologic connection. Your rule proposes that the areas that DNR preliminarily considers surface water and ground water to be hydrologically connected will be defined by results of an undefined stream depletion method. These methods do not define areas that are hydrologically connected. Aquifer boundaries, confining units, stream bed hydraulic conductivity, etc. define hydrologic connection and must be utilized in any determination.

Sound Science to be considered. We suggest a source of information to be used should be prioritized in order to assess the weighting of importance applied to

data sets, reports, maps and models. We suggest the addition of a footnote that references all available listed information and complete data sets that insure future determinations. We suggest all historical surface water and ground water data be used to confirm projected impacts of stream flow depletions, as well as to confirm the impact existing wells have already made on stream flow.

We request written answers to the following questions ordered by paragraph:

Paragraph two.

What is the lag effect, and how is it calculated?

Why is there a difference between, on average, 85 percent, and at least 65 percent?

Paragraph four.

When evaluating availability of stream flow over the previous 20 years, will DNR use the current 2005 list of junior right holders, or will they use junior right holders that existed at that time in the past?

What is the definition of junior rights?

Will the data considered in the previous 20 years be used to calibrate the prediction of the next 25 years?

Could any one year in the past 20 years, or the

next 25 years, trigger a fully-appropriated status?

We also question the selection of using a depletion of 10 percent of the amount pumped. What is the technical basis for selecting this percentage? Especially when it varies from the 28 percent that we utilized to define areas that were considered over-appropriated.

Paragraph five.

Will the preference system related to water use be taken into account when standards of delivery for non-irrigation rights are defined?

Paragraph six.

The last sentence talks about priority of use. What does the term priority mean in this case? Does it refer to first in time, first in right, or does this mean that the ground water and surface water are equal?

Paragraph seven.

We question the proposal of considering lag effect of wells over the next 25 years, and defining a 50 year steam depletion factor. What is the technical basis for selection of these variable time frames? A note: Harry Weakly performed a drought study based on tree rings in Nebraska, documented in the Journal of Soil and Water Conservation, November-December of 1962. Concluding from 1220 to 1952 there was an average of 23.9

years between droughts, and with an average duration of 12.8 years.

A general question, then, is why is there no explanation of Section 46-713(3)(b)? Will ground water that rely on stream flow be adequately protected by these rules?

Again, thank you for conducting this important hearing and receiving our comments and questions.

THE HEARING OFFICER: Thank you. And we've marked your testimony as Exhibit 30, and it is received in the record.

(Exhibit 30 was received in evidence. See Index.)

THE HEARING OFFICER: The next person I have listed, I am having trouble reading the name. They're speaking -- the company they're from looks like it's Kuehner? I'm sorry, I can't read -- there's a signature, and then it's K-u-e-h-n-e-r, the person -- You'll pass for now? Okay.

The next person is Ray Winz.

MR. WINZ: Good morning. My name is Ray Winz, that's spelled R-a-y W-i-n-z. I am a member of the Tri Basin NRD Board, and was a member of the Governor's Republican River Council, one of the original information groups on the Republican River, which has now been fully

controlled with irrigation restrictions. I thank you for the chance to comment on these proposed rules.

The 28/40 rules have been a standard used in many, many meetings, and used as a guideline presented to participants in those meetings. We are opposed to the 10/50 plan, as it is, will be publically unacceptable in the agriculture segment, and it may have a devastating economic impact in rural Nebraska.

I have attended many national meetings across the United States, which have had soil and water conservation forums, including the National Farm Bureau, and the GMDA and numerous other ones. At every one of these meetings, when they're talking about complications and restrictions and the slowness of things happening, the Nebraska NRDs have been singled out as the best organizations in the entire United States to solve problems, to reach consensus quickly, have local control, and get the job done within a reasonable time frame. It would be nearly impossible for the NRDs to administer the 10/50 rule as it crosses NRD lines, and basin lines. The NRDs, which have been esteemed as the best soil and water conservation entities in the United States, would be questioned, at the best, in their abilities. Not because of their local abilities, but because of restraints placed upon them.

I am surprised that I am one of the very few active farmers speaking yet at this group. And I count it a great privilege to be a farmer. One of the greatest things in my life is that I work beside two sons and three grandsons every day. Saturdays and Sundays included in this busy irrigation district. And I can also set in church on Sunday morning with those sons and grandsons. We can shut down a quarter-million dollar combine in the middle of the afternoon to go attend ball games with those grandsons. When we get back from the ball games, we can run until midnight to catch up that time. That is a great privilege in agriculture, and I'm damn proud to be an American farmer.

I am appalled at the never-ending adulterous changes which occur in the time between our preliminary meetings, our preliminary discussions, promises have been made to us. When we get down to the final draft in the final line, those promises and stuff seem to disappear. Only when the so-called best model available failed to dictate the politically aspired curtailment of ground water pumping was the 10/50 idea brought forward.

I personally am strongly opposed to the 10/50, and I support the 28/40 standard to be used. Thank you.

THE HEARING OFFICER: Thank you. Do you wish to put your testimony, written testimony in as an

exhibit?

MR. WINZ: Yes, I would.

THE HEARING OFFICER: We'll mark that as Exhibit 31.

(Exhibit 31 was marked for identification.)

And it is received into the record.

(Exhibit 31 was received in evidence. See Index.)

The next person I have on the list is Don Kraus. We'll mark this as Exhibit 32.

(Exhibit 32 was marked for identification.)

MR. KRAUS: My name is Don Kraus, D-o-n K-r-a-u-s. I'm general manager of the Central Nebraska Public Power and Irrigation District, and testifying on behalf of the District.

I appreciate the opportunity to provide comment today, and I'm going to summarize the written comments. I'm testifying today to support protection of surface water rights. We are in the midst of an extreme drought currently in its sixth year, and Lake McConaughy reached its lowest level in its 65 year history last September. The Central District reduced deliveries of surface water to its irrigators this year to approximately 37 percent of normal schedule deliveries due to reduced inflows over the past five years. While we have taken a number of

measures to conserve water, ground water pumping has continued without any restrictions, which would benefit surface water flows even though we estimate the impact to average 100,000 acre feet per year. The Integrated Management Plans for the area will have to find ways to significantly reduce impacts to stream flow in order to meet the intent and requirements of LB 962.

The State of Nebraska has a responsibility under LB 962 to implement rules that avoid these kinds of conflicts with surface water users and ground water users. A number of individuals in organizations have proposed weakening the definition of the hydrologically connected area to allow depletions of surface water right flows by an average of 28 percent over a 40 year period. The amount of water depleted from the river in the 49th year would be approximately 50 percent of the amount pumped in that year. This does not meet the standard of avoiding water user conflicts and providing a sustainable use for the future. Furthermore, it does not protect surface water supplies or meet a fairness test.

The Department of Natural Resources has proposed a rule which would define the geographic area to be considered as an area within which a well pumping for 50 years would deplete surface water flows by 10 percent of the water pumped in that year. This is more

appropriate and provides greater protection than the 20 percent/40 year proposal endorsed by others. However, a rule providing even greater protection would have been better. The Department needs to analyze the potential effects of the rule and ensure that the impacts to surface water rights are de minimis.

Concerns regarding management complexities where a proposed geographic boundary crosses a Natural Resource District boundary are important, but do not justify weakening the protection provided to surface water rights. The State of Nebraska should use the best scientific information available to implement management of its water resources. The NRDs have a responsibility to cooperate with each other, as with the Department, to meet the intent of Nebraska statutes. Thank you.

THE HEARING OFFICER: And you wish to offer Exhibit 32 into the record?

MR. KRAUS: Yes.

THE HEARING OFFICER: Exhibit 32 is received into the record.

(Exhibit 32 was received in evidence. See Index.)

The next person I have listed is Don Batie.

(Marked Exhibit 33 for identification.)

MR. BATIE: Good morning, my name is Don Batie,

it's D-o-n B-a-t-i-e. I farm north of Lexington in Dawson County, and I'm on the Nebraska Farm Bureau Federation Board of Directors, and Second Vice-President. And it is my pleasure today to testify on behalf of the Nebraska Farm Bureau.

I submitted written testimony that I wish to be entered into the record, and will summarize this written testimony, orally.

We do believe that the listed data proposed in the rule sufficiently meets the statutory requirement. We would suggest the list include an item to incorporate other data deemed relevant by the DNR when a determination is made. Such an all-inclusive item would eliminate the need to amend the rules and incorporate other data and information each time the Department is aware of some new information.

Regarding interference criteria, we can accept the criteria in the rule based on crop irrigation requirement during a typical irrigation season and the critical irrigation period. It seems reasonable to us and assures that sufficient water on average will be available for irrigation. We do, however, suggest that DNR monitor changes in cropping patterns and to take into account historical records of flows. Nebraska Farm Bureau can also accept the 25 year time period for

estimating lag effects from existing ground water pumping. However, we do have concerns with that, kind of how that is to be calculated. Changes in cropping patterns, weather, water use among other things influence impacts ground water use has on stream flow depletions. Because of these variables, accurate estimates of stream flow depletions can be difficult, and time and budget constraints in DNR limit that agency's ability to accurately determine stream flow depletions. We do believe that DNR should clearly outline methodology that it uses in its annual report required under Nebraska Statute 46-713, so that the methodology can be tested by outside, independent parties.

We, Nebraska Farm Bureau, does continue to have concerns with defining the hydrologically connected area as the area within the 10/50 line. Nebraska Farm Bureau policy calls for careful balancing of both ground water and surface water user interests in an integrated management system. We both appreciate and recognize DNRs efforts to prevent conflicts and problems in the future, and yet provide a standard that is workable. While we applaud these goals, we believe the proposed rule could limit ground water development, with little assurance that stream flow or surface water appropriators would benefit.

We believe the hydrologically connected area within the 28/40 line would be more appropriate.

There are several problems with the 10/50 line. First of all, the discussions of the Water Policy Task Force always focused on the 28 percent/40 year line. It is politically accepted and widely known among the water users.

Secondly, we believe that while DNR users would use sound science and the best data available, there is a margin of error in using sound science and best data. The relationship of hydrologically connected ground water and surface water is extremely complex and site-dependant. Because of the uncertainties, we believe that caution should dictate eliminating the geographic area.

Third, we believe the 10/50 line will result in more landowners being subject to multiple, fully-appropriated designations and integrated management plans. Multiple overlapping basins and plans will complicate the integrated management planning process, particularly when transfers or offsets might be required. These complications will increase user confusion, uncertainty and frustration in the integrated management planning process. If the 10 percent/50 year standard is used, we would suggest that a hydrologically connected area only includes an area that is not overlapped into

another basin already considered fully-appropriated. Thus landowners would not be subject to multiple designations and plans.

Again, thank you for listening to our comments.

THE HEARING OFFICER: Thank you. Exhibit 33 is received into the record.

(Exhibit 33 was received in evidence. See Index.)

The next person is Steve Huggenberger.

MR. HUGGENBERGER: I'll pass.

THE HEARING OFFICER: You'll pass? Okay.

Roger Houdersheldt? I hope I pronounced that right.

MR. HOUDERSHELDT: You did pretty good. A lot better than telemarketers.

THE HEARING OFFICER: Well, that's a compliment. You'll be offering that in?

MR. HOUDERSHELDT: Yes.

(Marked Exhibit 34 for identification.)

MR. HOUDERSHELDT: Now I'll test your spelling. It's Roger, R-o-g-e-r, Houdersheldt, H-o-u-d-e-r-s-h-e-l-d-t.

I am Roger Houdersheldt, chairman of the Upper Big Blue NRD board of directors, and I'm testifying on behalf of the board about the fully-appropriated basin

determination criteria rule. The Upper Big Blue NRD has had a ground water quantity management area since 1977, encompassing one million acres of irrigated lands. That is 15 percent of the total irrigation in Nebraska. Irrigation is a big deal in our NRD. It is of great economic importance. Ground water is being used and managed in a sustainable fashion. If in doubt, look at the long-term ground water level changes which show declines and rises, and declines and rises. The water table has fluctuated with a range of plus seven, to minus seven feet over the last 45 years. There is not a long-term decline in the Upper Big Blue NRD. The aquifers in our district are our reservoir, just like a lake behind a dam. In dry years we use some of the water in storage and in the wet years the aquifer is refilled. the problem as we see it is that surface water users and instream flow water right holders expect us not to tap our reservoirs. Aquifers must literally run over to satisfy some surface water appropriators. That is like telling surface water users they cannot get any water unless Lake McConaughy is spilling through the morning glory spillway. Our fear has been and remains that state law changes and department rules and regulations will place virtually all of our reservoirs off-limits to us. Now maybe you can see why we are very concerned and

involved in Nebraska's water policy discussions and formulation.

Criteria for the determination of fully-appropriated basins are necessary. We can live with Rule 001 as proposed, provided that existing ground water uses in fully-appropriated water basins are not required to be regulated by state law or Department regulations. That decision needs to remain with the individual NRDs involved in a fully-appropriated basin no matter which basin it is within the state.

We support the part of Rule 001.01 dealing with the use of 85 percent of the crop irrigation requirement during May 1 to September 1, and 65 percent of the crop irrigation requirement during July 1st to August 15th to determine shortages to junior surface water rights. We think that the 20-year historical record is reasonable because it will include wet and dry weather cycles. We oppose that part of the Rule 001.01 dealing with lag time. We think that lag time should not be used in the determination of fully-appropriated basins. It is very confusing and hard to understand. Lag effect has not been adequately thought out or explained. In fact, lag time may not make much difference in the end. Since only existing water uses are considered in determining if a basin is fully-appropriated, lag time does not matter if

the well is pumped continuously. Don't' believe us? Dig into COHYST.

For any lag time period chosen, there are changing hydrologic effects over time, such as changes in river flows, cropping, weather and water use which make any predictions suspect. Look at the 20 years you have historical data for, not the 25 years ahead that you don't. Experience has shown us that the farther out in time a projection is made, the farther off that projection will be. We have been there, done that. Missed it by a mile more than once. If you haven't, you will.

The use of lag effect is another attempt to force the restriction of ground water development when it otherwise would not come under regulation. The Nebraska Supreme Court has said for the third time this year that NRDs handle ground water regulation, not the Department. We cannot tell the Department what to do, and the Department cannot tell us what to do. We must work together in integrated water management.

We like the fifth paragraph of Rule 001.01 which begins with, "Use of the method." This paragraph clearly states that there is no priority of use between surface and ground water. The entire paragraph as drafted needs to be in the final rule. We oppose the 10

percent over 50 years boundary in Rule 001.02. For the past several years, the Upper Big Blue has been led to believe by studies, decisions, and policy discussions with others, including the Department of Natural Resources, that the 28 percent in 40 years line would constitute any boundary for regulatory efforts in the management of hydrologically connected ground water and surface water.

The 28 percent in 40 year concept was outlined in 1981 Missouri River Basin State Association Study. The 28 percent in 40 years concept is used in the Nebraska versus Wyoming case as the boundary. The 28 percent in 40 years line is used in the extensive discussion in the development of Nebraska's New Depletion Plan, and in fact is the boundary that is used in that plan. The 28 percent in 40 year line was used by the Department of Natural Resources for the boundary of the over-appropriated area of the Plate River.

The 10 percent over 50 year boundary for the Platte River, as determined by the SDF method means that a well along the West Fork of the Blue River in Hamilton County would be regulated for the Platte, even though the well would be south of the Blue River, south of Lincoln Creek, and south of Beaver Creek, all which drain into the main stem of the Blue River in Seward County. That

is unexplainable and unbelievable to our water users, municipal and agricultural alike. Fully appropriated basin boundary lines that overlap into another surface water river basin are unacceptable to the Upper Big Blue NRD. Boundaries for fully-appropriated basins need to be at either the 28 percent over 40 year line, or whatever number is adopted in Rule 001.02, or the surface water divide, whichever is closer to the river that has the surface water shortages. If the Platte is short of water, then ground water development in the Platte basin within the 28/40 line needs to be regulated. If the Blue River is short of water, then ground water development in the Blue basin within the 28/40 line needs to be regulated. No water use should be regulated by more than one integrated management plan. Integrated management plans need to be restricted just to the surface water basin in question.

We support Rule 002. We think that it is very important for the Department not to not only review NRD's ground water management plan, but also its ground water regulations. Just because the goals of ground water regulations do not specifically state that surface water rights are to be looked out for, the end result is that they are positively affected by the regulation of ground water use. There is a fiscal impact anytime a basin is

declared as fully-appropriated. Of course, it is not comparable to the economic impacts of reverting to dryland because of severe and long term water shortages. The fiscal impact of these proposed rules included the cost of drafting, negotiating, and implementing any integrated management plan. The fiscal impact also includes the cost of regulating of water users. Even if development is stopped, regulating costs continue.

Thank you for taking time to listen to our testimony.

THE HEARING OFFICER: Exhibit 34 is received into the record.

(Exhibit 34 was received in evidence. See Index.)

Next is James Paulsen.

MR. PAULSEN: I'm James Paulsen, and I have irrigated on canal systems since I was five years old. And some of the wells we have pre-date my existence.

THE REPORTER: I'm sorry, would you spell your last name, please?

MR. PAULSEN: P-a-u-l-s-e-n.

THE REPORTER: Thank you.

MR. PAULSEN: Ten percent in 50 years. Political solution or science? I think the former. One year ago in August, Ann Bleed stated that in all

likelihood, then entire Platte basin would be fully or over-appropriated when the DNR met in September. It did not happen. Why? I believe Ann's statements from Kearney one year ago awakened sleeping giants in the east who, last September, did not have all their ducks lined up in a row. In the past year, it is my understanding that both the cities of Lincoln and Omaha dramatically increased their pumping capabilities at Ashland, Nebraska, despite protests from the city of Ashland. I believe Lincoln and Omaha had a large political influence on the DNR when they met in September of last year, and I believe they and Central are having a large political influence in establishing the 10/50 formula. Establishing the 10/50 formula will move the water east to Lincoln and Omaha where two-thirds of Nebraskans live. It will further destroy economic development in the third district, where in 2003, we had the distinct honor of having seven of the twelve poorest counties in America.

Central admits that most of their water in McConaughy comes from return flows from surface water projects above them in western Nebraska and Wyoming. Those ditch companies, like we, have been turning to center pivots that have virtually no run off. The impact of ground water pumping on McConaughy has, in my opinion, been overstated because it was the only thing Central

could attack when the lake dried up. Nothing has been mentioned about the fact that rather than place safety measures at the dam to prevent a break, they simply lower the maximum lake level, which, in turn, destroyed much of the historic storage capacity. It was a political decision, and the wrong one. They could not force the canal companies above them to return the water that they had historically returned to the river. Ten/50 is a political decision that favors consolidating water interest into the hands of the DNR where large interests have a better chance of dictating water policy. I hope that the Natural Resource Districts here today will fight you tooth and nail on this proposal. No issue in Nebraska is more important. Thank you.

THE HEARING OFFICER: Thank you. Do you wish to submit your written comments into the record?

(Exhibit 35 was marked for identification and received in evidence.)

At this point, we will take a brief break for those who may wish to use the restrooms. We will go back on the record in about 10/15 minutes. Fifteen minutes with this crowd. Thank you.

(11:10 a.m. to 11:29 a.m. -- off the record.)

THE HEARING OFFICER: We are back on the record. And at this point, the next person on the list

of persons testifying is Chad Smith.

MR. SMITH: Good morning, my name is Chad Smith, C-h-a-d S-m-i-t-h. I'm here today representing both American Rivers as director of the Nebraska field office, and the Nebraska Wildlife Federation as a member of its board of directors. I was a member of the Negotiated Rule Committee that helped the DNR draft the proposed rule, and have previously submitted formal written comments.

In general, we believe that the DNR is moving forward in the right direction with efforts to define stream and river basins in this state that are fully-appropriated. As intended in LB 962, Nebraska is now moving into the modern age of western water policy, and the connection between ground water and surface water must necessarily be recognized as part of that policy maturation. Both ground water and surface water are the life blood of this state for agriculture and municipal use, recreation like hunting and fishing, and support of important fish and wildlife resources. As LB 962 is implemented, we believe that all these uses can be found to be compatible, and can thrive with more proactive and progressive water management.

Our chief concern about the DNR's proposed rules at the 10 percent/50 year line is too narrowly

drawn, and will leave a substantial amount of streamflow depletion outside the hydrologically connected area. We are concerned that -- and one of the reasons a more stringent criteria should be used is to help avoid the edge effect of driving new water development to just outside the 10 percent/50 year line, leaving those operators unregulated but creating a larger burden on operators within the line. Using more broad criteria would also put Nebraska more in line with neighboring states like Colorado, which should be considered given ongoing negotiations over management of a transboundary river like the Platte. As we discussed during the Negotiated Rulemaking process, we could not find any legal example that pointed to something as high as 10 percent being a de minimis use. This suggests that to make the final rule enforceable, the 10 percent should probably be changed something -- to a smaller percentage.

The final rule must ensure that the geographic area determined to be fully-appropriated captures the full long-term impacts of both surface water and ground water use. We are concerned that the 10 percent/50 year line will draw the fully-appropriated line too narrowly, putting neighbor against neighbor and avoiding the true hydrological impact of a basins water development and use. The final rule should be modified to avoid this

kind of conflict and ensure a more proactive approach to planning for future water needs in fully appropriated basins.

Just a few other highlights of our concerns that we've mentioned before in written comments. The final rule should make clear that when making a fully-appropriated determination, the DNR will utilize all relevant information from other government agencies such as the Nebraska Game and Parks Commission, and the Nebraska Department of Environmental Quality, as well as information from other sources. Given the implementation of LB 962, and the growing trend in being creative with water use and water rights, including the ability to transfer water rights, it's not, only a matter of time when non-irrigation rights will be involved in making determinations about whether a stream is fully-appropriated. In the final rule, the DNR should at least clarify whether the appropriate standard will be based on the underlying water right, or the current use of that right. The base flow tributary notion is a concern as it does not seem to be grounded in the best science. For example, where you have a stream bed with no visible surface flow, you have subsurface stream bed flow that is feeding the river, and thus reductions in surface or ground water supply to that dry bed tributary would

further reduce downstream flow.

The final rule should also include details about the time line for parties to submit additional information for the DNR to consider, when public review of the scientific data used by the DNR will take place, how long the public will have to comment on a proposed determination, and what time frame the DNR will use to make that final determination.

In conclusion, we hope that these comments will provide the DNR with feedback that will strengthen the final rule, make it more responsive to the water resource needs of the state, and make it more useful for the Nebraska residents. We appreciate the opportunity to provide these comments, and also to have been able to participate directly in the Negotiated Rulemaking Committee process. Thank you.

THE HEARING OFFICER: Do you have an exhibit to offer?

MR. SMITH: Yes.

THE HEARING OFFICER: The testimony will be marked as Exhibit 36, and is received into the record.

(Exhibit 36 was marked for identification and received in evidence.)

The next person I have listed is Mike Onnen.

(Exhibit 37 was marked for identification.)

MR. ONNEN: Good morning, my name is Mike Onnen, M-i-k-e O-n-n-e-n, and I'm manager of the Little Blue Resource District at Davenport. I appreciate the opportunity to comment on the proposed rules this morning. The Little Blue NRD board of directors generally supports the positions that have already been stated by the Nebraska Association of Resource Districts regarding the proposed, fully-appropriated rules, so I won't reiterate all of their comments.

The standard used for many years in various significant applications in Nebraska to determine impacts to stream flows, has been the threshold when ground water pumpage over a 40 year period is expected to deplete streamflow by at least 28 percent over that time. The 28 percent in 40 year criteria is the most widely accepted measure for stream depletion, and has been consistently applied throughout the state. We therefore believe that the 28 percent in 40 year criteria should continue to be used to determine fully-appropriated basins, not the 10 percent in 50 years as suggested in the regulation. From draft maps that we have seen show the extent of the possible fully-appropriated basins using the 10 percent in 50 year lines, and it reveals extensive overlap of lines across several NRD boundaries. We are concerned that the more agencies that are involved in trying to

administer and develop the joint plans, there is more potential for conflict and discord.

One factor that has always puzzled me personally, and I visited with Ann Bleed about it a couple of times, that when considering the inter-relationship between surface and ground water resources, is the capability of a ground water system to refill to capacity or beyond in periods of high precipitation and recharge, potentially wiping out many years of lag time depletions. We believe that these climatic and geologic factors may not be fully taken into account when applying the criteria for stream flow depletions.

We do appreciate the support the Department's -- and support the Department's statement in Section 002, which indicates that the Department will use the best scientific data and information readily available in making the determinations. At one time, rumors existed that older and less reliable studies may be used if they were viewed to provide a broader level of protection to streams.

Again, thank you for the opportunity to comment on these rules.

THE HEARING OFFICER: Thank you. Exhibit 37, which is Mike's testimony, is received into the record.

(Exhibit 37 was received in evidence. See

Index.)

John Thorburn.

(Marked Exhibit 38 for identification.)

MR. THORBURN: Good morning. I'm John Thorburn, J-o-h-n T-h-o-r-b-u-r-n. I'm the manager of the Tri-Basin Natural Resources District in Holdrege. Tri-Basin NRD recognizes the Department of Natural Resources is required by law to annually review the status of water use in Nebraska River basin. We appreciate the efforts made by the Department to gather public input and advice about regulations for status reviews, including this public hearing. My testimony is offered to supplement testimony by NARD President, Dave Nelson. The Tri-Basin NRD Board of Directors fully support the policy positions outlined by Mr. Nelson, and we concur with the points made in his testimony.

Tri-Basin NRD offers the following comments on and recommendations for the proposed DNR regulations. We believe that it is important for the Department to maintain a consistent standard for delineation of areas where ground water and surface water users will be regulated to protect water rights. We believe that there is strong precedent for the use of 28 percent average depletion over a period of forty years. It would, therefore, be a mistake for the Department to adopt a

different standard. We believe that regulating water users in one basin for the benefit of water right holders in another basin is a mistake. Delineation of fully-appropriated areas should be limited to the river basins or sub-basins so designated as described in statutes. We believe that it is unnecessary for the Department to consider the potential lag affect of current pumping on stream flows 25 years into the future. State law requires DNR to review the level of allocation in all Nebraska river basins annually. We believe that annual review ensures detection of a fully-appropriated condition in a timely manner.

The board of directors of Tri-Basin Natural Resources District look forward to helping the Department of Natural Resources improve the draft rule for the benefit of all Nebraskans. Thank you.

THE HEARING OFFICER: Thank you. Exhibit 38 is received into the record.

(Exhibit 38 was received in evidence. See Index.)

Tom Schwarz.

MR. SCHWARZ: My name is Tom Schwarz, T-o-m S-c-h-w-a-r-z. Equality under the law. Equal treatment under the law. These words found in a number of public documents in laws have come to mean something to me. You

can't treat one group of people different just because it's inconvenient, or unpopular. In utilizing a 28/40 or a 10/50 line, the Department is saying we know the 28 percent or 10 percent of water outside of this line will affect surface water users supply over a 40 or 50 year period, but, we are not going to worry about it. We will allow a taking of that surface water user's property right. I am primarily a ground water user, but I became very active in water issues when the Federal Energy Regulatory Commission tried to confiscate a great deal of surface water in Lake McConaughy. I helped organize a group to stop this property rights taking. We all need to stop and think about the impact of these rules. True, this taking will be Nebraskans taking water from other Nebraskans, not environmental group or a federal taking. But it really doesn't matter. Any time we allow a taking of some of our property rights, we diminish all of our property rights. The Department should adopt rules that protect the property rights of surface water users under prior appropriation and the rights of ground water users under the correlative rights doctrine. Thank you.

THE HEARING OFFICER: Thank you. Do you wish to submit anything into the record?

MR. SCHWARZ: I would like to submit via fax tomorrow.

THE HEARING OFFICER: That's fine. And we will be holding the record open until close of business Monday.

Okay, at this point in time, I'm going to go back over the list to those persons that deferred, or had testimony that would run longer than five minutes, and ask that they come up in order.

Marlin Rempel?

MR. REMPEL: I'll bypass.

THE HEARING OFFICER: Okay.

Don Blankenau?

(Marked Exhibits 39 and 40 for identification.)

MR. BLANKENAU: Given that I use Ms. Horsley as a court reporter two and three times a week, I'm counting on her to get my name right.

My name is Don Blankenau. I am a lawyer in private practice, and I'm here today representing the League of Municipalities.

We appreciate the opportunity to provide testimony regarding this proposed rule. And while we believe DNR staff has the best interest of the state at heart, the proposed rule fails to implement the intent of LB 962, and ultimately may prove to be illegal.

To begin with, one of the purposes of LB 962 was to empower the DNR to engage in an analysis that

would allow it to reach scientifically supported determinations of whether each basin in Nebraska is fully-appropriated. The analysis that supports these determinations must be grounded or accepted hydrologic practices that have been proven to provide reliable, predictive results. It is legally insufficient to simply employ study methodologies that yield results when such methodologies have not been accepted within the scientific community as being appropriate for the task at hand. Ideally, the rulemaking process that produced the draft rule would have started with a description of the various analytical tools or methodologies available for making streamflow depletion calculations and then examine the limitations of each of those methodologies. Knowing the methodologies and their limitations would have allowed the DNR to select the most suitable geographic and temporal criteria given the limitations of the preferred methodology. In this case, the geographic and temporal criteria referred to the 10 percent/50 line.

Unfortunately, that just didn't happen. Instead, the geographic and temporal criteria were selected without regard for what methodology would be used, or could be used, and what limitations might apply. As a consequence, the proposed rule doesn't even specify what methodology will be used to make streamflow

depletions other than where the model already -- where a mathematical model already exists. DNR staff did state on several occasions during the Negotiated Rulemaking Committee meetings that they intended to use the Jenkins Method or Solution. And we heard that again today from Dr. Bleed. Unfortunately, the Jenkins Model is not a method that has been accepted or employed by hydrologists in the United States to make calculations anticipated by this particular rule.

To explain further, any scientific discipline, or within any scientific discipline, some methodologies may be considered suitable for one purpose, but prove unsuitable for others. For instance, if I were to use Archimedes' displacement method to calculate the mass of an object, the method would be well suited to my objective. If we properly use the method, our results will be accurate and reliable. If however we were to use that same methodology to calculate the area of that same object, my methodology may prove to be poorly suited to my goal, and even though the methodology itself is based on sound science.

Now, in this case, the DNR apparently will use the Jenkins Method/Solution to calculate those streamflow depletions where no mathematical model exists. While these solutions have been based on sound scientific

principles, they are not tools suited for making the calculations as contemplated in the proposed rule. And I should note that during the negotiated rulemaking process, Jim Cannia, a hydrologist with DNR, stated that he would provide a detailed, written explanation as to how DNR intended to use the Jenkins Method. Unfortunately, no such written explanation was ever provided to the Committee, nor was there any reason why it was not provided. As a result, the Committee members, and no one in this room, knows exactly how DNR intends to make its decisions. But if Jenkins is used, as we've been told it will be, that method has not been found to be scientifically reliable for this specific application.

And with cooperation with Central Platte NRD and members of the Ground water Management Coalition, I had Stephen J. Brooks, a geohydrologist from Arizona review the proposed rule, and the Jenkins method, and associated methodologies. Mr. Brooks has been involved in hydrologic studies for over 23 years in six different states. He prepared an affidavit, which I've submitted as an exhibit to my testimony. That affidavit demonstrates that in many situations the Jenkins method will not produce accurate predictions of streamflow depletions caused by ground water use. While the Jenkins method could be used for a small number of wells located

within alluvial deposits adjacent to a stream, the results it produces when applied using a period of 25 years and over the broad geographic regions contemplated by DNR are based on numerous highly speculative assumptions. This will add a significant margin of error to the results.

We also note that while the DNR staff advised the Negotiated Rulemaking Committee, that the Jenkins model becomes more accurate when used over wide areas with many wells, as again stated by Dr. Bleed this morning. The affidavit of Mr. Brooks indicates that there is no published peer review information to support that contention. In addition, numerous corrections and refinements to the Jenkins Model have been proposed in the scientific literature in an attempt to overcome its shortcomings. None of those changes, however, deal with, or will overcome the geographic and temporal scale that is provided in this rule. During the negotiated rulemaking process, several committee members requested DNR to test the validity of any streamflow depletion methodologies by making calculations of streamflow depletions historical stream-gaging records. For instance, the methodology could have been plainly stated and implemented using data from 1990, and calculating streamflow out to the year 2000 on a gaged reach of any

given river. With this exercise, we would have illustrated the contemplated methodology and demonstrated its reliability. We further asked that this exercise be made available to the public for their review. Unfortunately, that request was not acted upon.

Throughout this process, DNR staff have stated that the calculations will be performed in a manner used by other states. This simply cannot be true for the simple reason that no other state has a law like LB 962 or has attempted to implement a regulatory scheme with such a broad geographic and temporal reach as contemplated in this rule, although some states like Colorado, Arizona, and New Mexico have used Jenkins methodologies to estimate the impact of individual developments on streamflows, no state has accepted these methodologies to project the impact of multiple wells over such large areas so far into the future. Indeed, almost all states, including desert regions like Arizona, have limited the application of such regulatory methodologies to near-stream alluvial areas only. Nebraska is alone on this approach.

For these reasons, we believe that the delineation of a 10 percent/50 year depletion line has little factual value or meaning. But even if you were to conclude that it does have -- that it is factually

correct and has meaning, DNR consistently represented to the public that the delineation would be limited to the 28/40 mark along major rivers only. It was not understood or expected that all tributaries in Nebraska would be subject to similar delineations so as to effectively spread the regulatory net over approximately 70 percent of the land area of the state. The belief that only major rivers would be subject to the 28/40 delineation was one of the major concessions by many groups that formed the support for LB 962. DNR's change in direction on this key element will undermine public support for this law and undercut faith in government.

With respect to the use of the computer generated ground water models, we are pleased that DNR is going to make use of COHYST and Republican River Compact Model. Those tools represent some of the best science available. Nevertheless, the rule contains no commitment by DNR that it will continue efforts to upgrade and refine those models using new data and model post-audits to ensure the results they provide are accurate and precise. In that respect, we note that both models are in their respective infancies and their long-term predictive capabilities have yet to be determined. Accordingly, a more modest time frame for future streamflow depletions should be selected until those

models have been demonstrated to be reliable. We suggest ten years as an appropriate time period. That period can be adjusted in future years as the model results demonstrate greater reliability in their predictive capabilities.

Finally, we wish to emphasize that this rule will significantly impact property rights, property values and the ability to attract new businesses to Nebraska. For decades one of the few competitive advantages Nebraska has enjoyed over other states, has been the availability of water. Nebraska is oftentimes referred to as "the Saudi Arabia of ground water." Today, despite a long and widespread drought, Nebraska has more, fresh ground water within its borders than any other state. We very much believe that our water must be carefully managed so that future generations of Nebraskans can also enjoy this resource. And that is both ground water and surface water. But in preserving the surface and ground waters of Nebraska, the DNR must be careful to avoid arbitrary and capricious acts of regulation that are not supported by accepted scientific methodologies. The failure to do so may result in over or under-regulation of Nebraska’s water, which can be harmful to Nebraska’s future economic and environmental future. Accordingly, we urge DNR to reject the rule as

it's presently written, and re-draft it in the light of the foregoing comments.

Thank you for allowing us to provide this testimony here today, and we would offer both exhibits that we have marked.

THE HEARING OFFICER: Thank you. Exhibits 39 and 40 are received into the record.

(Exhibits 39 and 40 were received in evidence. See Index.)

MR. BLANKENAU: Thanks.

THE HEARING OFFICER: Ron Bishop.

(Exhibit 41 was marked for identification.)

MR. BISHOP: Thank you. I appreciate the opportunity to appear before you today. My name is Ron Bishop, B-i-s-h-o-p. I'm general manager of the Central Platte Natural Resource District headquartered in Grand Island, Nebraska. I'm presenting testimony today on behalf of, and at the direction of, the Central Platte NRD Board of Directors.

Our NRD has a number of concerns about the proposed rule. These concerns fall into three general categories: The lag effect, instream flows, and geographic boundaries of the area to be managed.

Regarding our concerns about the lag effect, it is not clear to us how they will be calculated and

therefore there is a real question whether they should be included until the process that will be used is laid out and understood by those who are going to be impacted. But an even bigger contention about lag effect is the length of time that will be considered as an impact on surface flows. Our concern is that twenty-five years is too long a period to expect any degree of certainty due to changes in crop patterns, farm programs, weather, water use and a host of other items that can impact hydrology. As an example of how dramatic an impact things like farm programs or weather can have on hydrology, I would offer the Central Platte Valley during the early 1980's as a prime example. I believe it was 1983 that the Department of Agriculture offered the PIK, or Payment in Kind program that idled half the irrigation wells and half the irrigated cornfields in the Valley. That year of greatly reduced pumping was followed the next year by an annual rainfall of up to 42 inches, which is close to twice what we normally get, resulting in a greatly increased amount of ground water recharge. The combined impact of those two years of decreased pumping and increased recharge, was ground water rises of up to ten feet, resulting in a major change in the ground water/surface water interrelationship in just a matter of two years. We would therefore suggest that the

Department either drop the lag effect or better define it and adopt ten years as a more realistic time period to look into the future.

Instream flows, the second item, was discussed at the Negotiated Rulemaking Committee meeting, but are not mentioned in the report or the proposed rules. Previous to LB 962, instream flow water rights were not considered in the management of ground water for the benefit of inter-related surface water. Because of the exclusion, instream flow water rights could be granted for flows that were only there 20 percent of the time, a much lower standard than other water rights, which need to be there, usually, about 85 or 90 percent of the time. Now instream flows can not only cause ground water to be regulated, just like other surface rights can, but can also cause basins to be declared fully-appropriated. The Department needs a rule for instream flow of water rights that junior water rights are not administered, and basins are not declared fully-appropriated if those water rights are for instream flows. After reviewing the long-term historic average streamflow, the instream flow appropriations are being met less than 20 percent of the time than they could be regulated. As an even better alternative to that rule, we need to change the instream flow law to require the approved flow rates for instream

flows to be available at least 80 percent of the time in order to place instream flows on the same standard as all other water rights are.

Our third category of concern on the rules deals with geographic area, within which surface water and ground water should be considered hydrologically connected, and thereby managed. For the last ten years or more, we've been led to believe, based on policy discussions and decisions, that 40 years and 28 depletion would be the standard that would constitute any boundary for regulation. And I'll give several examples:

The Nebraska New Depletion Plan for the Platte River Basin uses 40/28.

Nebraska in their discussions in settlement with Wyoming used 40 year/28 percent.

The Director of DNR asked our NRD to post suspension to drilling new wells in the western part of our NRD within the 40 year/28 percent boundary.

And finally, the Department of Natural Resources used the 40 year/28 percent line as a boundary for over-appropriated parts of our Natural Resource District.

In addition to being the recognized standard, utilizing the 40/28 criteria has the advantage that it greatly reduces the overlap among basins and the

potential necessity of rewriting an NRD's Integrated Management Plan every time an adjoining basin is declared fully appropriated. As an example, I would offer Platte County in the eastern end of our NRD. Within that part of Platte County that lies within Central Platte, there is likely a piece of ground that if a ground water well was to be drilled, it would impact the Platte River 50 percent of the pumped amount in the 40 years of pumping and 53 percent in 50 years. We could also hypothetically say that this same well could well impact the Loup River as much as 25 percent in 40 years and 28 percent in 50 years. And it's possible that it may also impact the Elkhorn basin. With those kinds of impacts under the current standard, if 10 year/50 year depletions were used, we could be required to write up to three integrated management plans for each of the three basins that that particular well might impact. We would strongly suggest the Department reconsider their proposed 50/10 boundary, and return to the standard it has been utilized up to now, the 40 year/28 percent.

One final comment that we want to provide deals with the tools that will be used to determine the geographic boundary regardless of what year/percentage criteria is utilized. We were glad that you had ground water models in the listing of information that would be

considered in making the determination required by Section 46-713, as we feel the COHYST model is far superior to Jenkins method. Jenkins has a number of assumptions that are not true for the Central Platte River and the Central Platte Basin. I'd just like to review quickly those assumptions that go into Jenkins.

Assumption one is the transmissivity does not change with time. Thus for a water-table aquifer, drawdown is considered to be negligible when compared to the saturated thickness. That's not true in the Central Platte basin.

The second assumption. The temperature of the stream is assumed to be constant, and to be the same as the temperature of the water in the aquifer. Again, this is not true, and in fact it's never true in Nebraska.

The third assumption is the aquifer is isotropic, homogeneous, and semi-infinite in a real extent. Again, not true in the Central Platte basin.

The fourth assumption is the stream that forms the boundary is straight and fully penetrates the aquifer. Not true with Central Platte.

Water is released instantaneously from storage is the fifth assumption. And again, that is not true in the Central Platte basin.

The sixth assumption is that the well is opened

to the full, saturated thickness of the aquifer. Again, not true of Central Platte basin wells.

And seventh and final, the pumping rate is steady during any period of pumping. And again, that's not true in the Central Platte basin with their wells.

All of the above make Jenkins a poor choice for determining the extent and magnitude of ground water impacts especially on the Plate River, and we do support your proposed rule to utilize ground water models such as COHYST and your determination.

I thank you for taking the time to listen to our comments.

THE HEARING OFFICER: Thank you. Exhibit 41 is received into the record.

(Exhibit 41 was received in evidence. See Index.)

Next is Robert O'Dell.

MR. O'DELL: I'd defer again. Thank you.

THE HEARING OFFICER: Okay. Mr. O'Dell has declined to testify.

Next is the name that I had difficulty with before. K-u-e-h-n-e-r?

UNIDENTIFIED VOICE: I'll pass.

THE HEARING OFFICER: You'll withdraw from testifying? Okay. Thank you.

Steve Huggenberger.

MR. HUGGENBERGER: I'll withdraw.

THE HEARING OFFICER: You wish to drop from testifying? Okay. Thank you.

Okay, at this time, I'd invite any others in the audience who would like to provide testimony who did not previously sign the testimony sheet, to take your turn at the microphone. You did not have to sign the testimony sign-in sheet in order to testify at this hearing.

You may come forward and testify.

Again, just a reminder for those testifying, please state your name, spell your first name and last name, indicate if you're on behalf of any entity or if not, just on behalf of yourself. Thank you.

MS. LANDIS: Thank you. My name is Margaret Landis, M-a-r-g-a-r-e-t, Landis is L-a-n-d-i-s. And I'm a landowner, and I'm representing myself and my land.

My land is located in the Central Platte NRD. I am under the moratorium. I became concerned when -- I have a lake on my land and it has gone down about 30 to 35 feet. My lake is ground water, and that's what raised part of my concern. And when I read in the -- I served on the county board and I worked on the -- getting the army ammunition plant land back on the tax roles. Well,

during that process, and you're probably unaware of the RDX problem but they put a pump and treatment out on that land and it pumps a million gallons a day out of the ground water cleaning up the RDX plume that is in there. That's going to run for about 30 years, and we're about eight or nine years into that. So we're taking a million gallons out of those -- of that land right now. But when Heritage Disposal came along and they wanted to put a factory out there, and they wanted to detonate bombs or something, that they were going to take 300,000 gallons of water out of our ground water every day. Now this is every day. This isn't a farmer farming, you know, three or four months out of the year. This is every day. So I went to the county board, and I said, "Hey, maybe we ought to look at this, you know, the ground water's really dropping bad, and maybe we should do something about this." Well, they thanked me and said goodbye.

Well, it wasn't only three or four months after that I read in the paper that an ethanol plant wanted to go on the ordnance plant, and low and behold a half mile from my land. As I'm sitting up in my dried up alfalfa field, one-half mile an ethanol plant is going to go, and they can pump, and do pump, a million gallons a day to run that ethanol plant. Well, I didn't think that was quite right, and so I went to the Central Platte NRD

Board. And I said, "Hey, you know, we really need to look at this. We are really depleting the ground water over on these tracts of land." And Ron Bishop was nice, and he said, "Well, yeah, but Margaret, hey, they're not under the moratorium. They can do what they want." They can get a well permit and away they go. And that's what has brought me here.

I don't really understand the 28/40. I don't plan to be a hydrologist, but I do understand my land, and I do know -- I did apply to put a well under my ground for 39 acres to water my alfalfa so I'd have hay for my horses. And I got a letter from the NRD saying hey, you can't do it. And I accept that. I don't have a problem with that at all, but I do have a problem that a half-mile down the road they can put an ethanol plant in that will pump a million gallons a day around the clock. You know, a farmer only irrigates three or four months out of the year. I don't have any problem with the farmers. And that's their livelihood. But I do have a problem with corporate America coming into our ag land and taking all the water. And I said that. I said, "You know, you guys want to come in and you want to take all of our water. Not just mine, but the farmers all around the ordnance plant." And that's why I'm here today is to say that we really need to look at corporate America and

what they're taking. And I just don't know what else we can do about it. And I guess, in essence, in a way I guess I support the 10/50 standard, because it will protect the land around my farm. And I don't know what else it will hurt. But I think something has to be done that one road, if you're on the west side of the road, you can put in and take all the water you want, but if you're on the east side of the road, you can't take enough to irrigate 39 acres for some hay? Something is the matter, and it's that that I wanted to bring to your attention. And also on this ground, and this is from the US Army Corp of Engineers, and it's a drafted Environmental Impact Study. And like I said, I did serve on that committee several years ago. There is also proposed down the road, a power plant. And NPPD has the right to buy that land exclusively. The4 county board did that. Nobody else can buy that land until they decide if they want to locate this power plant. Now from this study it said -- we're talking about water resources both in terms of quantity and quality. These effects would range from negligible to moderate intensity. Some of these impacts may be significant. Among the water resource impacts are a large on-site demand for ground water for up to two million gallons per day for the power plant alone, and more for industrial development like

Heritage Operations, which is up and going, and/or an ethanol plant on-site. This is a potentially significant impact in an area for a moratorium on new drilling has been imposed, and the Central Platte River may be fully-appropriated.

So it is with that that I do urge you that I really think something has to be done. I think something has to be done about the amount of water somebody can take. And with that, I do want to thank you for your time. I don't have anything else to say. And I do want to make just one additional comment. I have called your department twice, and I was met with nothing but courtesy, and respect and my phone calls were returned, and I really appreciate that because that isn't always the say-so when you call a state department. Thank you very much.

THE HEARING OFFICER: Thank you. Did you have anything you would like to introduce into the record?

MS. LANDIS: I don't believe so. She dictated.

THE HEARING OFFICER: Okay. Thank you.

Does anyone else care to testify at the hearing today? Please come forward if you do.

(No response)

Any other persons wishing to testify should come forward at this time.

(No response)

Last chance. Anyone wishing to testify, come forward, please.

(No response)

THE HEARING OFFICER: Okay, I show that it's 12:10. This hearing is now closed, however, the record will be held open as I mentioned earlier through the close of business on Monday, August 15th, 2005, for the receipt of any additional written testimony that anyone would care to produce. Once the record is closed, the Director of the Department will consider the testimony and the Exhibits presented at this hearing prior to making his final determination on whether to go forward with the proposed rule, or to revise the proposed rule and schedule a further hearing. Thank you for attending.

(Concluded at 12:12 p.m. on August 11, 2005.)

(Exhibits 42-50 were marked for identification and received in evidence.)

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